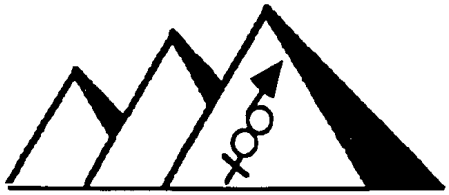
THE EGYPTIAN FERTILITY AND STERILITY SOCIETY

The Seventeenth International Annual Conference
December 13th – 14th, 2012
Marriott Hotel Zamalek
Cairo- Egypt

REPRODUCTIVE HEALTH: Update on the Land of Pharaohs



Abstract Book

2012

A WELCOME MESSAGE FROM THE PRESIDENT.

Dear Colleague,

When our Society was established on May 1994 by its 21 founder members we adopted the bylaws of the Society, an important part of it is listed in this booklet.

After a little more than 18 years since establishment of our Society, I really am delighted to declare that our Society had been very successful in achieving most of its objectives.

One of the main objectives of the society is to hold this annual meeting in September every year. The society had been holding the meeting regularly every year since its establishment. Following the January 25th Youth Revolution the date of holding the meeting was rescheduled to be held during December each year. This year's meeting is our 17th conference and is scheduled to be held during the period December13-14, 2012.

This year the society continued this tradition by having the support and collaboration with **the Egyptian Representative Committee (ERC) of the Royal College of Obstetricians and Gynecologists.** It also collaborated with **AZHART ART Unit, Al Azhar University** to hold a precongress hands on Workshop on "**A Basic & Advanced Clinical and Laboratory Training Course in ART for Developing Countries**" during the period December 8th-12th, 2012 in collaboration with FIGO Committee of Reproductive Medicine, Lubeck University and WHO (TBC).

Every year the Society holds **a large number of workshops** for training on Advances in the Techniques of Management of Infertility with hands on training in **several governorates in Egypt.**

The society publishes the Egyptian Journal of Fertility and Sterility since 1997. Today 33 issues of our journal are already published. It is published regularly every six months. Our journal enjoys a great popularity in Egypt. It also attracts researchers from abroad to publish their original articles in it. Publishing a journal is not an easy job. I would like to thank the Editor in Chief **Prof. Mohamed Yahia**, for his great support to publishing this Journal.

When we started our Society we were only 21 founder members, today we are more than 1050 registered members. This is one of the largest national fertility societies worldwide. We are really growing very fast. Thanks to the

enthusiasm, which you all expressed and I do look forward to seeing more members, joining our Society. Based on the records of the activities of your Society, the Society is a member of the prestigious International Federation of Fertility Societies (IFFS).

In endeavour of the Society to encourage research and scientific activities among its young members it allocated one prize in the amount of 50000 Egyptian Pounds for the best Innovative research submitted to the conference. The prize is kindly provided by Merck Serono pharmaceutical company.

The society received 6 presentation submitted for this prize, which had been judged by three International referees from Europe.

On behalf of you all I thank Merck Serono Company for its unrestricted support of the scientific activities of the society.

Special thanks to our guests from all over the world for their prompt response to our invitation to participate in this meeting. Indeed I really am grateful to them all for accepting to be with us today and to share with us their great expertise in the field of reproductive medicine in spite of their very heavy commitments. I wish them all a very enjoyable stay and a safe journey back home or to other destinations to fulfill their commitments in different parts of the World.

I sincerely thank all members of the Board of Directors particularly our Secretary General, and the secretary of the conference, **Professor Amr El Shalakany** who did a wonderful job by putting together such outstanding scientific and social program for this year's conference. Sincere thanks to my secretarial staff particularly **Mrs. Azza El Tobgi and Mr. Reda El Shebiny** for the tremendous efforts in the preparation of this conference**.**

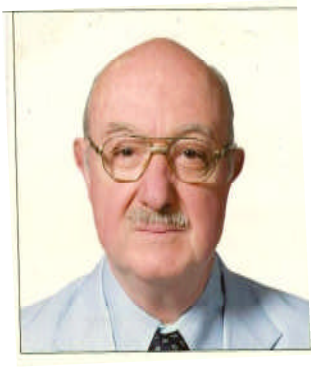
Yours Sincerely,

Prof. Gamal I. Serour,

FRCS, FRCOG, FACOG
President of the Society
and the Conference

A MASSAGE FROM THE VICE PRESIDENT.

Dear Distinguished guests & colleagues:



Dear colleagues, invited speakers and distinguished guests, it is our pleasure to welcome you to this regular annual Scientific event the 17th Annual International Conference of the Egyptian Fertility and Sterility society. Hoping that you will enjoy, both, the scientific content and social events.
The program includes a variety of interesting topics in the field of human reproduction (both male and female), new approaches (diagnostic and therapeutic) which suit various medical areas of interest.

Welcome to Cairo and hoping that you will join us again in our future scientific activities.

Yours Sincerely,
Prof. Mokhtar H. Toppozada,
Vice President of the Society and the conference.

A MESSAGE FROM THE SECRETARY GENERAL:

Dear Honourable Guests, Participants and Colleagues,

It is my pleasure and honour to welcome you to the 17th Annual Conference of the Egyptian Fertility and Sterility Society (EFSS). It is the second time for the EFSS annual meeting to take place in the post revolution Egypt in Cairo. Cairo is still the same charming though authentic but forever young city and the conference venue overlooking the Nile will simply remind you of this. The event not only would take you to the last minute update in reproductive medicine and clinical practice in the field of women fertility care but we worked hard to make it a great social gathering. The scientific content will also broaden to include other issues in gynecologic and obstetric practice that are linked to the care of fertility.

Our scientific program, thanks to your collaboration, enjoys the magnificent participation of 18 world class international speakers in addition to more than fifty respectable Egyptian speakers.

Every year the Society holds **a large number of workshops and meetings** on Advances in the techniques of Management of Infertility with hands on training in several governorates in **Egypt including Cairo, Damietta, Fayoum, Sharkia, Port Said, Ismailia, Menoufia, Dakahlia, Gharbia, Menia, Assiut, Sohag and Aswan Governorates and Nagaa Hamadi, Zagazig and Mahalla El Kobra cities.**

I would like to sincerely thank, on behalf of you all, **IBSA, Bayer Schering Pharma, NYCOMED, Egyptian Promoters Center, Merck Serono, Inspire Pharma, Premium Pharma and Biolife Pharma Companies**, for their generous support of the conference and very fruitful cooperation. I would also like to thank all other Companies for their support.

On behalf of the organizing committee and all of Egypt I wish you a very successful and fruitful scientific meeting and a memorable gathering**.** Thank you for your invaluable participation.

Yours Sincerely,

Prof. Amr El Shalakany,

Secretary General of the Society and the conference.

PRESIDENT OF THE CONGRESS:

Prof. G. I. Serour

VICE PRESIDENT OF THE CONGRESS:

Prof. M. Toppozada

SECRETARY GENERAL OF THE CONGRESS:

Prof. Amr El Shalakany.

OFFICERS OF THE SOCIETY:

Prof. Gamal I. Serour	**PRESIDENT**
Prof. Mokhtar Toppozada	**VICE PRESIDENT**
Prof. Amr El Shalakany	**SECRETARY GENERAL.**
Prof. Emad Darwish	**TREASURER**
Prof. Mohamed Yahia	**MEMBERS**
Prof. Hosam T. Salem	
Prof. Ibrahim Fahmy	
Prof. Ibrahim Mahrous	
Dr. M. El Sherbiny	

EDITOR OF THE SOCIETY JOURNAL:

Prof. M. Yahia.

ASSOCIATE EDITORS:

Prof. Hossam T. Salem. **Prof. Ahmed Badawy**

***FOUNDERS OF THE SOCIETY*:**

Prof. M. Abdel Azim	El Sahel Hosp., MOH.
Prof. K. F. Abdel Kader	Benha Univ.
Prof. M. Aboulghar	Cairo Univ.
Prof. A. M. Assaf	Benha Univ.
Prof. A. M. El Attar	Tanta Univ.
Prof. K. El Hodaiby	Ain Shams Univ.
Prof. K. I. El Lamei	Ain Shams Univ.
Prof. M. S. El Sahwi	Alexandria Univ.
Prof. A. H. El Tagy	Al-Azhar Univ.
Dr. M. A. Elwan	El Galaa Hospital, MOH
Prof. M. M. Fayad	Cairo Univ.
Prof. A. Ghaly	Zagazig Univ.
Prof. K. H. Gohar	Maadi Military Hospital
Mrs. T. Heikal	Arab woman Union
Prof. M. R. Osman	Al-Azhar Univ.
Prof. G. I. Serour	Al-Azhar Univ.
Prof. H. T. Salem	Assiut Univ.
Prof. M. Toppozada	Alexandria Univ.
Prof. M. N. Younis	Al-Azhar Univ.
Prof. M. M. Zahran	Cairo Univ., Urology Dept.
Prof. K. Zaki Shaeer	Cairo Univ., Andrology Dept.

SCIENTIFIC COMMITTEE:

Prof. G. I. Serour ***Prof. Amr El Shalakany***
Prof. Emad Darwish

ORGANIZING COMMITTEE:

Prof. G. I. Serour ***Prof. M. Toppozada***
Prof. A. El Shalakany ***Prof. E. Darwish***
Prof. M. Yahia ***Prof. I. Fahmy***
Prof. I. Mahrous ***Prof. Hossam T. Salem***
Dr. M. El Sherbiny

ADVISORY COMMITTEE: (Alphabetical)

Prof. Ahmed Aboul Nasr *Prof. Amin Fahmy*
Dr. Abdel A. El Shobary *Prof. Abdel Hamid Wafik*
Prof. Abdel Maguid Ramzy *Dr. Adel Nawar*
Prof. Afaf A. Ismaeil *Prof. Ahmed Awara*
Gen. Ahmed Y. Kabeel *Prof. Emad Darwish*
Prof. Gamal I. Serour *Prof. Hamdi Badrawi*
Prof. Hassan Sallam *Prof. Hassan Salah Kamel*
Prof. Hosam T. Salem *Prof. Ibrahim Fahmy*
Prof. Ibrahim Oun *Prof. Ibrahim Mahrous*
Dr. M. Abdo Midan *Prof. Maged Abou Seeda*
Dr. Mahmoud Shawer *Prof. Mamdouh Shaaban*
Prof. Medhat E. Helmy *Dr. Mohamed El Sherbiny*
Prof. Mohamed Aboulghar *Prof. Mohamed Osman*
Prof. Mohamed Yahia *Prof. Mohsen Noseir*
Prof. Mokhtar Toppozada *Prof. Mostafa Hegab*
Prof. Mostafa Eisa *Prof. Mostafa El Zayat*
Prof. Salah Ali Ismail *Prof. Naser El Lakkany*
Prof. Taymour Khalifa *Prof. Tharwat El Ahwani*

INVITED INTERNATIONAL SPEAKERS: (Alphabetical)

1. Prof. Botros Rizk,	*USA*
2. Prof. Charles Chapron,	*France*
3. Prof. Ceaser Aragona,	*Italy*
4. Prof. Dominique de Ziegler,	*France*
5. Prof. Felice Petralgia,	*Italy*
6. Prof. Giorgio Vittori,	*ITALY*
7. Prof. Hamid Rushwan,	*UK (FIGO)*
8. Prof. Hassan Nasrat,	*KSA*
9. Dr. Khaldoun Sharif,	*Jordan*
10. Prof. Klaus Diedrich,	*Germany*
11. Dr. Magdi Hanafi,	*USA*
12. Dr. Medhat Hassanaein,	*UK*
13. Prof. Mats Brännström,	*Sweden*
14. Dr. Mohamed Hefni,	*UK*
15. Prof. Safaa El Hassani,	*Germany*
16. Prof. Shawky Badawy,	*USA*
17. Prof. Vincent Anaf,	*Belgium*
18. Prof. Willem Ombelet,	*Belgium*
19. Dr. Yousri Afifi,	*UK*
20. Dr. Zaid Kilani,	*Jordan*

SECRETARIAL OFFICE:

Mr. M. Reda El Shebiny Mrs. Azza El Tobgi

LOCATION :

Marriott hotel, Omar Khayam and Casino.
16 Saray El Gezira Street · Cairo, 11211 Egypt
Tel: + 20 (2) 27283000
Fax: + 20 (2) 27283001

OFFICIAL LANGUAGE: *English*

AUDIO VISUAL ROOM:

The Audio Visual room, Sakkara, is located on the same floor of the Conference Halls. Facilities for trying your CDs will be available there. Please handle your presentation at least 2 hours before the beginning of your session.

ABSTRACTS OF THE CONFERENCE December 13th-14th, 2012

WEDNESDAY, December 12th, 2012:

(Zamalek Marriott Hotel Cairo)

4:00 –7:00 p.m.: REGISTRATION (Salon Vert)
6:00 –7:00 p.m.: PRESS CONFERENCE (Salon Vert)

THURSDAY, December 13th, 2012:

08:00 – 09:00: REGISTRATION (Salon Vert)

09:00- 09:25: OPENING CEREMONY (Aida Ballroom)

Medical Exhibition (Aida Foyer):

Thursday, December 13th, 2012 09:00 a.m.- 05:00 p.m.
Friday, December 14th, 2012 09:00 a.m.- 05:00 p.m.

SCIENTIFIC PROGRAM

THURSDAY, December 13th, 2012:

09:00 – 09:25: OPENING CEREMONY: (Salle A)

09:25 – 11:45: SESSION (1) (Salle A): PLENARY (1)

12:15 – 14:05: SESSION (2) (Salle A): PLENARY (2)

14:05 – 14:50: SESSION (3) (Salle A): INDUSTRY SPONSORED SYMPOSIUM BAYER HEALTH CARE.

15:15 -17:00: SESSION (4) (Salle A): ENDOMETRIOSIS & INFERTILITY

SESSION (5) (Salle B): PCOS AND OVULATION INDUCTION

SESSION (6) (Salle C): GENERAL GYNECOLOGY

FRIDAY, December 14th , 2012:

09:15-12:00: SESSION (7) (Salle A): PLENARY (3)

12:30-14:00: SESSION (8): (Salle A): EGYPTIAN REPRESENTATIVE COMMITTEE (ERC) OF THE ROYAL COLLEGE (RCOG)

SESSION (9) : (Salle B): OVARIAN HYPERSTIMULATION AND IMPLANTATION

SESSION (10): (Salle C): IVF/ICSI

14:30-16:00 SESSION (11): (Salle A): ENDOSCOPY

SESSION (12): (Salle B): PREGNANCY AND OBSTETRIC OUTCOMES

SESSION (13): (Salle C): ONCOLOGY AND FERTILITY

16:00-17:00: SESSION (14): (Salle A): BEST RESEARCH PRIZ PRESENTATIONS

THURSDAY, December 13th 2012:

SESSION (1): (Salle A) (10.00 – 11.45)

PLENARY SESSION (1)

(1) IVF: 10 YEARS OF SUCCESSES AND FAILURES.
Prof. Klaus Diedrich, Germany

Assisted reproductive technologies (ART) is nowadays performed worldwide and more than 5 million babies were born after using these techniques.
In the last 10 years many new methods in assisted reproductive technologies were developed:

- ovarian stimulation: GnRH-antagonists
- **assisted** hatching
- single embryo transfer (SET)
- blastocyst transfer
- preimplantation genetic screening (PGS)
- in vitro maturation
- 0cryopreservation and vitrification

but not all of them were successful and could improve the results.

- The use of GnRH-antagonists in combination with gonadotrophin today seems to be the ovarian stimulation of first choice and the life birth rate is the same as with the socalled long protocol (Griesinger et al., 2009; Al-Inany et al., 2011) Human chorionic Gonadotrophin as the triggering agent for ovarian hyperstimulation syndrome (OHSS) can now be safely replaced with the bolus dose of Gonadotrophin releasing hormone agonist. This has been shown to reliably prevent OHSS, the most serious complication of ovarian stimulation. The socalled "OHSS free clinic" becomes possible (Griesinger et al., 2007)
- The aim of every infertility treatment is:
  to avoid multiple pregnancies and to improve the pregnancy and life birth rate. The solution is the transfer of one selected embryo (SET). It could be shown especially in the scandinavien countries that by a single embryo transfer the multiple birth rate can be reduced significantly with a good and constant life birth rate of more than 26% per embryo transfer (KarlstrOm et al., 2007).
  In Germany the SET is not allowed because of our strict Embryo Protection Law. Therefore in Germany the multiple pregnancy rate is higher in comparison to Sweden and also the life birth rate is lower.
- Cumulative pregnancy rates (CPRs) and live birth rates (CLBRs) are much better indicators of success in IVF programmes than cross-sectional figures per cycle or embryo transfer.

- For this reason a 10 year cohort study of patients undergoing their first assisted reproductive technique cycle was conducted. Patients were followed until live birth or discontinuation of treatment. All IVF and ICSI cycles and cryo-cycles with embryos derived from frozen pronuclear stage oocytes were included (Gnoth et al., 2011).
- A total of 3011 women treated between 1998 and 2007 were included, and 2068 children were born; women already with a live birth re-entered the analysis as a 'new patient'. For 3394 'patients under observation' with 8048 cycles, the CLBR was 52% after 3 cycles (the median number of cycles per patient), 72% after 6 cycles and 85% after 12 cycles. A CLBR of -50% was achieved for patients aged under 40 years, after the cumulative transfer of six embryos. The mean live birth rate from one fresh cycle and its subsequent cryo-cycle(s) was 33%.

Most couples with infertility problems can be treated successfully if they continue treatment. Thereby ART can reach natural fertility rates. Even with the restrictions in place as a result of the German Embryo Protection Law, CLBR reach internationally comparable levels.

References

Al-Inany HG, Youssef MA, Aboulghar M, Broekmans F, Sterrenburg M, Smit J, AbouSetta AM. Gonadotrophin-releasing hormone antagonists for assisted reproductive technology. Cochrane Database Syst Rev. 2011 May 11;(5):CD001750.

Gnoth C, Maxrath B, Skonieczny T, Friol K, Godehardt E, Tigges J. Final ART success rates: a 10 years survey. Hum. Reprod 2011; 26:2239-2246.

Griesinger G et al: Reprocluktionsrnedizin in Europa and Deutschland. Gynakologe, 2009

Griesinger G, von Otte S, Schroer A, Ludwig AK, Diedrich K, Al-Hasani S, SchultzeMosgau A. Elective cryopreservation of all pronuclear oocytes after GnRH agonist triggering of final oocyte maturation in patients at risk of developing OHSS: a prospective, observational proof-of-concept study. Hum Reprod. 2007;22(5):13481352.

Karlstrom et a1: Jahreszahlen Lecture, Friedrich-Ebert-Stiftung, 2007.

(2) MYOMAS AND INFERTILITY.

Prof. Giorgio Vittori, Italy.

Epidemiology of myoma demonstrates that is a common disease, with ethnic differences. Mean age at first delivery is increasing, especially in western world and benign diseases interfering with fertility are correlated with age. Relationship between myoma and fertility are demonstrated with strong evidence only for submucousal lesions. Intramural and subserous myomas, according to available

scientific evidence, are responsible for impaired fertility only for in selected clinical cases.
Medical and surgical treatment offer a wide range of choices: gnrh analogues, progestagens, hysteroscopy, laparoscopy, laparotomy, HIFUS, uterine arteries embolization, cryotheraphy, bipolar coagulation allow conservative treatment of myomas. Only some of them, according to scientific evidence, are indicated in case of fertility restoration or preservation.
The goal of this presentation is to analyze new anthropological and demographical evidence, costs and benefit of treatment, new evidence coming from ART experience and finally look for guidelines and metanalysis

(3) INFERTILITY AND ENDOMETRIOSIS: A GLOBAL PERSPECTIVE

Prof. Dominique de Ziegler, France.

(4) HOW OPITIMIZE DIAGNOSTIC MODALITIES FOR ENDOMETRIOSIS DIAGNOSIS.

Prof. Charles Chapron, France.

(5) HIGHLIGHTS ON REPRODUCTIVE MENTAL HEALTH.

Prof. Ahmed Okasha, Egypt

THURSDAY, December 13th 2012:

SESSION (2): (Salle A)(12.15 – 14.00)

PLENARY SESSION (2)

(6) ANOVULAR INFERTILITY: ITS TREATMENT AND PREVENTION OF COMPLICATIONS.

Prof. Gamal Serour
Prof. OB/Gyn. Al Azhar University
President of EFSS,
FIGO Immediate Past President, Cairo- Egypt

In a lifetime, approximately 400 follicles will reach full maturation and ovulate. The remaining follicles become atretic before reaching maturity. Development from primordial to a pre–ovulatory follicle takes at least 85 days and only the last part of follicle development is gonadotropin dependent. When a follicle reaches the stage of gonadotropin responsiveness during the women's early follicular FSH rise "FSH Threshold", this follicle is stimulated to continue growing (recruited) and secretes E_2. Due to negative feedback of the rising inhibin B and E_2 serum concentrations at the hypothalamic-pituitary level, FSH serum concentration will decrease in response. Only the largest follicle that needs the smallest amount of FSH is able to continue growing and becomes the dominant follicle.

Ovulatory disorders account for approximately 30% of all cases of infertility. Type II anovulatory infertility is the most common form of ovulatory dysfunction and is characterized by asynchronous gonadotrophin production with FSH and E_2 levels within the normal range. A large proportion of women with WHO Type II anovulatory infertility have polycystic ovary syndrome (PCOS) and 50% are obese. Primary treatment of patients with infertility and chronic anovulation aims at restoring normal physiology, that is, selection of a single dominant follicle followed by monoovulation.

Body weight is considered to have a significant impact on ovarian function and nearly 50 percent of WHO Type II patients are obese (BMI= > 25 m/kg^2**)**. Lifestyle modification resulting in weight reduction is reported to result in restoration of the endocrine milieu: improving insulin sensitivity and hyoperandroginism. Weight reduction should be advised before any treatment is started. Also A very low BMI (<19m/kg^2) may also cause cycle disturbances and WHO type 1 anovulation. When the metabolic state is normalized reflected by a normal BMI (>20 m/kg^2), a regular menstrual cycle will be restored in the majority of patients.

First-line therapy for WHO Type II anovulatory infertility is usually clomiphene citrate (CC). However, a substantial proportion (approximately 40%) of women

with WHO Group II anovulatory infertility fails to conceive following CC therapy. Such patients may benefit from gonadotrophin therapy to stimulate follicle development and "induces ovulation. OHSS and multiple pregnancy are serious risk of gonadotropic stimulation and should be avoided. Chronic low dose and Low Dose protocols have been suggested to avoid these complications. Other drugs including Tamoxiphene, Insulin sensitizers, Dopamine Antagonist, Aromatose inhibitor have been used to induce ovulation in type II anovular infertility. LOD in patients with PCO had been used for induction of ovulation in cases resistant to CC and/or gonadotropins.
HCG is essential for the pathophysiology of OHSS and stimulation of production of vascular endothelial growth factor. OHSS may present early 3-7 days following HCG administration or late 12-17 days after hCG administration. Always look for manifestations of OHSS in patients at risk of OHSS before and during ovulation induction. The paper discusses how to avoid the risk of OHSS and MP in patients receiving OI drugs for the treatment of anovular infertility.
Conclusion: In OI we should think of patient characteristics rather than treatment characteristics for the choice of appropriate patient-centered or patient tailered approach. CC followed by FSH if needed is a highly effective treatment (CLB rate 71% after 12 months). Although ovulation induction aims at restoration of monofollicular development and ovulation, major complications of OHSS and MP result from limited control of follicular growth.

(7) ACCESSIBLE INFERTILITY CARE – FROM DREAM TO REALITY : FIRST PREGNANCIES WITH A SIMPLIFIED IVF PROCEDURE

Willem Ombelet [1,3] , Jonathan Van Blerkom [2], Rudi Campo [1],
[1]Department of Obstetrics and Gynecology, Genk Institute for Fertility Technology, Schiepse Bos 6, 3600 Genk, Belgium
[2] Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, CO 80302, United States.
[3]Coordinator of the ESHRE Special Task Force on Developing Countries and Infertility

Introduction: Infertility care is probably the most neglected health care issue in developing countries, affecting more than 200 million couples. The social stigma of childlessness still leads to isolation and abandonment. Bilateral tubal occlusion due to sexually transmitted diseases and pregnancy-related infections is the most common cause of infertility. Consequently most cases of infertility are only treatable by using assisted reproductive technologies which are either unavailable or too costly.
Objective of the study: To develop and study the results of a new method of simplified low-cost IVF and compare the results with regular IVF considering embryo quality and pregnancy outcome.
Methods: This is an interim analysis of a prospective study which started in Genk in January 2012. In this study embryo quality is compared after *in vitro*

fertilization (IVF) using two identical culture media in a different culture environment (regular versus simplified IVF). Only women aged less than 36 years with >= 8 oocytes were included in the study. Half of the oocytes were treated using regular and simplified IVF.

An optimal culture environment for embryos in the low cost simplified IVF setting was achieved by connecting one vacutainer tube with 1ml of standard culture medium to a second vacutainer tube in which a chemical reaction between sodium bicarbonate and citric acid together with water produces enough bicarbonate to buffer the pH of the culture medium. Once the medium is equilibrated, oocytes and sperm are inserted in the tube using a needle and syringe, keeping the closed environment. Fertilization and embryo development are visualised daily until day 3 through the glass of the vacutainer. During the whole period, the culture is kept at 37° C in a heated block.

On Day 3 an independent person decided which embryo(s) were replaced, whether originating from the regular or simplified IVF culturing.

Results: This interim report of the first 28 cycles showed that the top embryo(s) originated from the simplified method in 60.7 % (17/28) of cases. For the simplified method we observed an ongoing pregnancy rate of 35.3 % per cycle (6/17) and 1 biochemical pregnancy. The embryo implantation rate was 35.7 % since all pregnancies originated from a single embryo transfer.

A cost analysis shows that the costs associated with this method of simplified IVF are between 10 and 20 % of the calculated costs for regular IVF.

Conclusion: Our simplified low-cost IVF procedure results in an acceptable number of top quality embryos when compared to regular IVF. Our results also show that the pregnancy rates using this low cost IVF procedure are very promising. If our good results are confirmed in a larger cohort of patients we believe that IVF can be offered at reasonable prices in resource-poor countries and will be available for a much larger part of the world population in the near future.

(8) UTERUS TRANSPLANTATION: MYTH OR REALITY?

Mats Brännström
Department of Obstetrics and Gynecology, Sahlgrenska Academy, University of Gothenburg, Sweden

The last frontier in the efforts to treat female infertility is absolute uterine infertility (AUFI). The major groups of women with AUFI are those that lack a uterus from birth (Rokitansky-syndrome) or through hysterectomy (cervical cancer, myoma, peripartum emergency hysterectomy) in addition to those that have a defect uterus (Ashermans´s syndrome, myoma, uterine malformation).

The first human attempt of uterus transplantation (UTx) took place in Saudi Arabia more than 12 years ago, when a 26-year old, previously hysterectomized, woman received a uterus from a 46 year old live donor. Although the surgeries were successful, the uterine graft had to be removed after 3 months because of prolapse with secondary necrosis. The second human UTx case was performed in Turkey in year 2011, with the uterus coming from a young female multi-organ donor.

The experience from these two cases and the great research efforts during the last decade in various animal models of UTx have led to that this non-vital, but life-propagating type of transplantation soon may come in clinical use.

Our research group has used several animal models (mouse, rat, pig, sheep, baboon) to examine various aspects of UTx. In the mouse UTx-model we achieved successful syngeneic uterine transplants by end-to-side aorta-aorta and vena cava-vena cava vascular anastomoses. These syngeneic transplants proved to tolerate cold ischemia (in-between graft harvesting and transplantation) for 24 h and to be able to implant embryos that developed to offspring with normal growth trajectory. In allogeneic transplants of the rat uterus (end-to-side anastomosis to the common iliacs), with immunosuppression by tacrolimus, we demonstrated normal offspring during follow up well into adulthood. Fertility was also shown in an auto-UTx model in the sheep, with end-to-side anastomosis to the external iliacs. In both the pig and the baboon model long-term survival of a uterine allograft was demonstrated when induction and triple immunosuppression were used.

In the human, we have demonstrated that human uterine tissue is tolerable for cold ischemia during at least 12 h. Furthermore, satisfying lengths of both the uterine artery/anterior portion of internal iliac artery and the uterine vein/trunk of internal iliac vein could be retrieved at radical hysterectomy, demonstrating the feasibility of live uterus donation. In trials of uterine retrieval

from female multiorgan donors, the uterus with bilateral vasculature up to and including the common iliacs, was successfully harvested in all attempts.

In conclusion, the united UTx animal research and human experience will soon reach a level that could warrant introduction of UTx in the human and this should be done under a strict research protocol.

(9) MOLECULAR MECHANISMS IN THE PATHOGENESIS OF ENDOMETRIOSIS.

Prof. Felice Petralgia, Italy.

Patrizia Carrarelli, Serena Pinzauti, Romina Novembri, Felice Arcuri, Lucia Funghi, Flavio De Pascalis, Paola Piomboni and Felice Petraglia

Obstetrics and Gynecology, Department of Molecular and Developmental Medicine University of Siena, Siena, Italy

Endometriosis is a benign disease which involves stem cells metaplasia, development from Muellerian remnants or implantation of endometrial cells following menstrual reflux or by lymphatic or hematogenous dissemination. It is a hormone dependent disease with an estrogen-dependence and a progesterone-resistance mechanism.

Endometrial cells from women with endometriosis show an enhanced proliferation and increased ability to implant and survive in peritoneum and in other ectopic locations. Impaired sensitivity of endometrial cells to apoptosis contributes to the abnormal implantation and growth of endometrium in peritoneal mesothelium with an hyperactivation of inflammatory pathways and increased macrophages. The resulting chronic inflammatory state is associated with an higher production of pro-inflammatory modulators, such as reactive oxygen species that have been shown to modulate cell proliferation. Indeed, endometrial growth factors have been shown to play a role in in endometriosis, since, under estrogen and progesterone stimulation, they affect proliferation and differentiation of endometrium. In particular, CRH and Urocortins are neuropeptides which in eutopic and ectopic endometrium of women with endometriosis, show a deranged expression, which may have an impact on inflammation. A role of activin and follistatin on endometrial cells is also part of the pathogenetic mechanism of endometriosis.

(10) WHY DID MRS. X DIE? (VIDEO)

Prof. Hamid Rushwan, FIGO Chief Executive, UK

The Safe Motherhood Initiative was launched in 1987 in Nairobi. Its main objective was to alert the international community to the tragedy of high maternal mortality rates which occur mainly in low- and middle-income countries, and most of which are preventable.

Professor Mahmoud Fathalla is one of the pioneers of the Safe Motherhood movement. In the 1980s, with support from the World Health Organisation, the film 'Why Did Mrs X Die?' was produced - it had a great impact in advocacy and education on the prevention of maternal deaths globally.

The film was remade with support from FIGO and the *Hands On for Mothers and Babies* charity in the UK, utilising the latest technological advances in animation. It was launched at the 2012 FIGO World Congress in Rome.

THURSDAY, December 13th, 2012:

SESSION (3): (Salle A) (14.05-14.50)

INDUSTRY SPONSORED SYMPOSIUM
BAYER HEALTH CARE

(11) IUCD FROM GENESIS TO PERFECTION.

Prof. Osama Shawki, Egypt

(12) OC'S BENEFITS BEYOND CONTRACEPTION.

Prof. Ashraf Kortam, Egypt

THURSDAY, December 13th, 2012:

SESSION (4): (Salle A) (15.15-17.00)

ENDOMETRIOSIS & INFERTILITY

(13) MODERN MANAGEMENT OF OVARIAN ENDOMETRIOMAS.

Prof. Charles Chapron, France.

(14) EFFECT OF SELECTIVE ESTROGEN MODULATOR : RALOXIFENE : ON ENDOMETRIOMA. IN VITRO STUDY

Prof. Shawky Badawy, USA.

The objectives are:
- Discussion on the Biology of SERMS.
-Effect on Bone Metabolism.
- Effect on lipid profile
- Effect on endometrium
- Effect on Endometriosis.

I will then discuss the In Vitro study from our laboratory , to outline the development of Endometrioma cell lines, their tratment with SERMS. I will demonstrate the effect on proliferation and Estrogen secretion .

(15) ADENOMYSIS AND LEIOMYOSIS, DIAGNOSIS BY TRANSVAGINAL ULTRASOUND, AND COLLELATION WITH HISTOPATHOLOGY.

Ultrasound diagnosis of adenomyosis, leiomyoma, or combined with histopathological correlation.

Magdi Hanafi, M.D.
Saint Joseph's Hospital of Atlanta, Emory Healthcare System
Atlanta, GA, USA

Ultrasound Diagnosis of Adenomyosis, Leiomyoma, and combined Adenomyosis with leiomyoma

Objective: To evaluate the accuracy, sensitivity, and specificity of the diagnosis of Adenomyosis, leiomyoma and combined adenomyosis with leiomyoma by the use of transvaginal ultrasound (TVS) in correlation to the histopathological findings.
Methods: This is a retrospective study of 163 female patients with a pre-operative transvaginal ultrasound diagnosis of adenomyosis, leiomyoma, and adenomyosis with co-existing leiomyoma. All patients underwent surgery for the treatment of adenomyosis, leiomyoma, or both. Of the 163 patients included in this study, 130

patients diagnosed with adenomyosis or both adenomyosis and leiomyoma via TVS, underwent hysterectomy. Thirty-three symptomatic patients diagnosed with adenomyosis and leiomyoma via TVS underwent myomectomy with excision of the surrounding myometrium which presumably contained adenomyosis. Following surgery, a histopathological examination was performed by the hospital pathologists. The microscopic diagnosis of the specimen was recorded.
Results: Histopathological confirmation of the TVS diagnosis of adenomyosis (n=123) was positive in 93 patients (75.61%) and negative in 30 patients (24.39%). The sensitivity, specificity, and accuracy of TVS in the diagnosis of adenomyosis was 84.55% (p<.0001), 43.40% (p=0.41), 71.17% respectively. This suggests TVS diagnosis of adenomyosis is sensitive, but not specific. Histopathological confirmation of the TVS diagnosis of leiomyoma (n=134) was positive in 133 patients (99.25%) and negative in 1 patient (0.75%). The sensitivity, specificity, and accuracy of TVS in the diagnosis of leiomyoma was 96.38% (p<0.0001), 96.00% (p<0.0001), and 96.32% respectively. TVS was sensitive, specific, and accurate in the diagnosis of coexisting adenomyosis and leiomyoma.
Conclusion: This study demonstrated that transvaginal ultrasound is a valuable non-invasive method that should be utilized in the diagnosis of adenomyosis and leiomyoma. It is sensitive in the diagnosis of adenomyosis, but not specific. It is sensitive and specific in the diagnosis of leiomyoma and combined adenomyosis with leiomyoma.

Keywords: transvaginal ultrasound, adenomyosis, leiomyoma, histopathology, diagnosis, myomectomy, hysterectomy.

Send correspondence to:
Magdi Hanafi, M.D.
GYN & Fertility Specialists
5673 Peachtree Dunwoody Road, Suite 750
Atlanta, GA 30342
404-851-9300 □ *FAX* 404-851-1358
MHanafi@aol.com

(16) THE NATURE OF THE ENDOMETRIOSIS INDUCING FACTOR

Osama Azmy MD FRCOG DFFP, Wael El-Garf** MD PhD*
**Professor of Obstetrics & Gynaecology, **Associate Professor of Molecular Genetics, Reproductive Health Research Department, National Research Centre*

MicroRNAs comprise a post-transcriptional layer of gene regulation shown to be involved in diverse physiological processes. **Aim:** We aimed to study whether regulatory networks in the blood of endometriotic women that determine transformation of mesenchymal stem cells into endometrial like cells may involve a miRNA component. **Patients and Methods:** We examined the expression levels

of 88 miRNAs using SYBR Green-based real-time PCR array in blood samples from 12 women divided into three groups (control group [3 women], mild endometriosis group [4 women] and [5 women] in the severe endometriosis group). The relative abundance of miRNA level was calculated by using the ΔΔCT method. **Results:** MicroRNA-130a was significantly up-regulated in the severe endometriosis group compared with the mild endometriosis and the control groups. Twenty one miRNAs were significantly down-regulated in the mild endometriosis group and two miRNAs were significantly down-regulated in the severe endometriosis group compared with the control group. **Conclusion:** From these data, we conclude that miR-130a is a regulator of endometriosis phenotypes largely through its ability to modulate the expression of GAX and HOXA5 and functionally antagonized its inhibitory effects on endothelial cells proliferation, migration and differentiation. Therefore we believe, it may be the unknown Endometriosis Inducing Factor.

(17) ENDOMETRIOSIS AND INFERTILITY. THE INTIMATE RELATION.

Prof. Hesham Abdel Fattah Salem, **Egypt**

Endometriosis is still an enigmatic subject that through more questions than answers when it jumps to mind. We will try to highlight the current status of the condition known as endometriosis as regards its relation to infertility from many points of view as the pathogenesis , symptomatology , conventional and recent lines of managements and also some lights over the current staging systems and how it is deficient in describing the condition .
It is a way to open doors for more points that need discussion and analysis in this increasingly prevailing disease.

THURSDAY, December 12th, 2012:

SESSION (5): (Salle B) (15.15-17.00)

PCOS AND OVULATION INDUCTION

(18) PCOS: CONSEQUENCES AFTER MENOPAUSE.

Mats Brännström, Department of Obstetrics and Gynecology, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

The polycystic ovary syndrome (PCOS) is an endocrine disorder that affects approximately 10% of women. It is characterized by oligo/anovulation, hyperandrogenism, and polycystic ovaries. PCOS is associated with infertility, acne, hirsutism, abdominal obesity, type 2 diabetes, hypertension and dyslipidemia. Hence, PCOS women carry several cardiovascular disease (CVD) risk factors and may also have altered body composition during menopause due to increased hyper-androgenicity during fertile age. Little, is known concerning hormonal levels in PCOS women after the menopausal transition.

A cohort of PCOS women (PCOS diagnosis between years 1956 and 1965) and their 120 randomly allocated age-matched controls (from the WHO MONICA study) were at first examined in year 1987 regarding anthropometry, reproductive hormones, CVD risk factors, bone mineral density (BMD), lifestyle factors, medications, medical history (via questionnaire) and re-examined 21 years later in 2008 (patient age at that time 61-79 years) with the same variables. The National Board of Health and Welfare Registry and the Hospital Discharge Registry provided information on morbidity and mortality.

Postmenopausal PCOS women had persistently higher free androgen index (FAI), but lower FSH than controls. Hirsutism, hypertension and hypertriglyceridemia were more common, but climacteric symptoms and hypothyroidism were less prevalent among PCOS. The higher waist/hip ratio (WHR) among PCOS women in 1987 could not be detected at follow-up 21 years later, possibly due to an increase in hip circumference in PCOS and to an increase in weight among controls. BMD, fractures, diabetes, CVD events, total mortality and cancer incidence were similar in the PCOS women and controls at follow-up.

In summary, late postmenopausal PCOS women were still hyperandrogenic and hirsute with persistent hypertension and hypertriglyceridemia. However, the incidence of fractures, diabetes, cancer, CVD morbidity and total mortality was similar to the control population. Differences in body composition had disappeared in PCOS compared with controls during 21 years follow-up. It is concluded that PCOS women are as healthy as the general female population after menopause in spite of persisting CVD risk factors.

(19) ROLE OF LAPAROSCOPIC OVARIAN DRILLING IN PCOS.

Mohamed Hefni, FRCOG Consultant
Jyotsna Pundir, MRCOG Clinical Fellow
Benenden Hospital Trust
Kent. UK

PCOS is the main cause of anovulatory infertility and affects approximately 5 – 7% of women of reproductive age. The mainstay of treatment in anovulatory fertility is ovulation induction (OI).
Strategies for ovulation induction include – Weight loss in women with BMI improves the prospects of both spontaneous and drug-induced ovulation. The 2008 ESHRE/ASRM consensus conference decided that patients should lose 5% of their initial weight before undergoing fertility treatment.
The first-line treatment of anovulation is clomiphene citrate (CC). CC gives a cumulative ovulation rate over 6 months of almost 80% and almost 40% of women become pregnant. Prolonging CC treatment for more than 6 months does not improve results. Patient is regarded as resistant to CC if fail to ovulate after 6 months of treatment. Failure to conceive can also be regarded as treatment failure. Approximately 20% of women are described as 'clomiphene-resistant.

The purpose of drilling is to restore fertility in non-ovulating women with PCOS by using the least aggressive procedure possible.
The mechanism by which surgical treatment for PCOS-related infertility acts is not clearly understood. Intra-operative complications are rare and mainly involve complications of laparoscopy or of general anaesthesia, and risk of electrical accident.
It is difficult to get a clear idea of how common postsurgical adhesions are in women who have undergone LOD because second-look laparoscopy is rarely performed routinely. The number of ovarian punctures did not influence either the extent or severity of adhesions. The rate of adhesions does not seem to influence the pregnancy
rate in these studies. Theoretical risk of loss of follicles could damage the ovarian reserve and make the patient less fertile. There is no concrete evidence of diminished or premature ovarian failure after ovarian drilling. Drilling on one ovary was just as effective in restoring ovulation (in both the treated and untreated ovaries) as the same procedure on both ovaries. LOD carries a reduced risk of multiple pregnancy.

Data from recent Cochrane review 2012 included Sixteen trials and reported on LOD (with or without medical OI) versus other medical treatments; LOD in women undergoing (ART); Various techniques of LOD for example: laser versus diathermy,
LOD plus second-look laparoscopy versus drilling plus expectant management, LOD of one ovary compared with LOD of both ovaries. They concluded that there

was no evidence of a significant difference between LOD with and without medical OI compared with other medical treatments on the outcomes of live birth, pregnancy, miscarriage or OHSS. Multiple pregnancy rates appeared to be significantly reduced following treatment with LOD. Costs also appeared to be lower for LOD treatment. There was no evidence of a significant difference in rates of live birth, pregnancy, ovulation or miscarriage when unilateral was compared with bilateral drilling.

(20) ULTRASONOGRAPHIC AND HORMONAL ASSESSMENT OF OVARIAN RESERVE AFTER LAPAROSCOPIC OVARIAN DRILLING IN POLYCYSTIC OVARY SYNDROME.

Fatma M. El-Sokkary[a], Iman I. Al-Noor[a], Emtethal El kholy[b], Mahmoud f. Bayomy[c].

[a] Department of Obstetrics and Gynecology, Al-Zahraa Teaching Hospital, Al-Azhar Faculty of Medicine for Girls, Cairo, Egypt.

[b] Department of Clinical Pathology, Al-Zahraa Teaching Hospital, Al-Azhar Faculty of Medicine for Girls, Cairo, Egypt.

[c] Al-Sahel Teaching Hospital, Teaching Hospital Organization, Cairo, Egypt.

Objectives Polycystic Ovary Syndrome (PCOS) is a complex disorder with heterogenic clinical and endocrine features. Laparoscopic Ovarian Drilling (LOD) has been used as one of the treatment options for women with clomiphene citrate (CC) resistant PCOS. The effect of LOD on ovarian reserve is controversial. This study aimed to assess ovarian reserve after bilateral and unilateral LOD.

Study Design This study included 40 patients with anovulatory infertility due to PCOS. Patients divided into two groups, group 1 underwent bilateral LOD and group 2 underwent unilateral LOD. Ovarian reserve assessment was done before, and three months after LOD.

Results Ultrasonographic markers of ovarian reserve showed significant decrease after both bilateral and unilateral LOD in the form of postoperative decrease in both ovarian volume and antral follicular count, and increase in resistance index and pulsitility index. Also, Hormonal markers of ovarian reserve showed significant decrease after both bilateral and unilateral LOD in the form of postoperative increase in FSH, and decrease of antimullerian hormone and LH.

Conclusion Both bilateral and unilateral LOD are followed by reduction of ovarian reserve as evidenced by increase of FSH, and decrease of LH, AMH, AFC, ovarian volume and ovarian stromal blood flow. No significant difference in ovarian reserve parameters found after bilateral and unilateral LOD. Unilateral LOD may be recommended to be the preferred operative procedure for PCOS, infertile patients, who are clomiphene citrate resistant, as it is as effective as bilateral LOD in normalization of the ovarian reserve parameters.

(21) LETROZOLE: NEW TRENDS IN ICSI.

Mohamed S Abd Rabbo, MD; Hassan A. Elmaghraby, MD; Nagwa A Mashali, MD; Mohamed Elmahdy, MD*
Alexandria University, Egypt

Background: ICSI/ET in endometriosis patients has poor outcome by traditional protocols with lower number of oocytes and a reduced fertilization rate. Endometriotic implant acts as an intracrine source of estrogen through over-expression of P450 aromatase. Combined administration of aromatase inhibitor and GnRH-agonist may efficiently suppress estrogen biosynthesis through a combined pituitary, ovarian and local in the implants.
Objective: Evaluate the effect of using letrozole in improvement of the results of ICSI/ET in endometriosis women with long agonist protocol.
Patients: Sixty infertile women with minimal and mild endometriosis according to the revised American fertility society classification were scheduled for ICSI /ET.
Methods: All women were subjected to biopsy from suspected lesion using scissor to confirm diagnosis and activity. Women were randomized into 2 groups. Group 1: using the traditional luteal long agonist protocol usingtriptorelin 0.1 and Group 2: using letrozole 5mg/ day after 5 days of start of GnRH agonist for 5 days. Day 6 serum estradiol level, final serum estradiol, number of retrieved oocytes, number of MII oocytes, fertilization rate, cleavage rate, number of class (A) embryos and clinical pregnancy rate were assessed.
Results: 5 cases were cancelled, 3 were in the study group and 2 were from the control group. There was a negative correlation between age of the patient and lesion activity (rho -0.873*) (P 0.002). Days of stimulation were prolonged in the active treated group than in the non active treated group (P 0.019).There was a significant difference between the percentage of class (A) embryos between the active and the non active subgroups in the control cases (P 0.045) which was neutralized in the treated group. Pregnancy rate didn't show any significant difference between the two studied groups. It was 29.6 % and 34.6% in the letrozole treated group versus control group (P 0.631)
Conclusions: There is a negative correlation between lesion activity and age of the patients. Activity of lesions affects the quality of embryos. Letrozole suppress the activity of the lesions which may improve the quality of embryos.

(22) ADDING L-CARNITINE TO CLOMIPHENE RESISTANT PCO.

Prof. Hossam Thabet, Egypt.

(23) SEQUENTIAL LETROZOLE AND HMG: A SUCCESSFUL NOVEL SUPER OVULATION PROTOCOL SIGNIFICANTLY IMPROVE PREGNANCY RATE IN PCOS PATIENTS UNDERGOING ICSI, RANDOMIZED CONTROLLED TRIAL.

Ahmed F. Galal, MD, PhD
Lecturer ob & Gyn , Division of reproductive Medicine and infertility, Alexandria university ,Egypt

Introduction: Polycystic ovary syndrome (PCOS) is the most frequent endocrine disorder in women of reproductive age, In –vitro fertilization and intracytoplasmic sperm injection (IVF-ICSI) have been used with success to treat patients with PCOS It was found that patients with PCOS responded with significantly higher ovarian steroid production and produce three times more eggs than did non PCOS patients but with lower fertilization and cleavage rates

This study was done to evaluate a noval approach of using letrozole in soft protocol of controlled ovarian superstimulation in women with PCOS undergoing ICSI Primary outcomes include gonadotropins dosage, days of stimulation, number of oocytes retrieved number of mature oocytes.

Secondary outcomes include: fertilization rate, number of grade A embryos, Endometrial thickness and estradiol level at the day of and clinical Pregnancy rate

Material and methods: A prospective randomized controlled study included 40 PCOS women allocated for ICSI recruited from a private infertility clinic after IRB approval .Patients allocated randomly (after taking informed consent) into two groups, Group A, Induction of ovulation done by HMG ampoules (150-225 IU / day) according to patients response starting from the second day of the natural or induced menstrual flow

Group B , Induction of ovulation by letrozole tablets 5 mg /day from day 2 to day 6 then HMG ampoules (150-225 IU /day) according to patients response started from day 7 of menstrual follow till the day of HCG administration

Results: letrozole significantly reduce the number of HMG ampoules (12.4 vs 22.4) and days of stimulation (6.2 vs 9.7) .the number of oocyte retrieved and the mature oocytes was significantly higher in the HMG only group(12.8 vs 7.3 and 9.7 vs 5.9 respectively) however the fertilization rate was significantly higher in letrozole group leading to non-significant difference in the number of grade A embryos (3.8 with letrozolevs 3.9 with HMG). Clinical pregnancy rate was higher significantly in the letrozole group (35 % vs 20%). Endometrial thickness was nearly the same 10.3 vs 10.4 mm, there was a trend towards a non-significant high Estradiol level in HMG only group

Conclusion controlled ovarian stimulation with letrozole followed by HMG in PCOS women undergoing ICSI significantly improve the pregnancy rate and decrease the HMG dosage and duration needed for stimulation.

(24) THE PREDICTIVE VALUE OF SERUM AND FOLLICULAR FLUID ANTI-MULLERIAN HORMONE IN WOMEN WITH POLYCYSTIC OVARIAN SYNDROME UNDERGOING IN-VITRO FERTILIZATION.

Ayman Nady Abdelmeged[1], A. Mahran[1], A. El-Adawy[1], M. Eissa[1], Y. Hattem[1], J. Darne[2], R.W. Shaw[2], S.A. Amer[2].

[1]Minia University, Obstetrics & Gynaecology department, Minia, Egypt. [2]University of Nottingham, Royal Derby Hospital, Derby, United Kingdom.

Introduction: The aim of this study was to determine whether serum and follicular fluid (FF) AMH concentrations in women with polycystic ovarian syndrome (PCOS) could be useful predictors of the outcome of in-vitro fertilization (IVF).

Material & methods: This prospective cohort observational study was conducted in two collaborating centers: a Fertility Unit in the UK and an IVF centre in Egypt. The study included 20 anovulatory women with PCOS and 23 age and weight matched women without PCOS (control group) who underwent IVF treatment (23 cycles in each group). The long agonist protocol was used in all cases. Blood samples were collected on cycle day two to measure baseline serum concentrations of AMH, gonadotrophins and androgens. AMH concentration was also measured in follicular fluid (FF) obtained during oocyte retrieval. The serum and FF AMH concentrations were compared between pregnant *vs.* non-pregnant patients. Serum AMH concentrations were correlated with the total dose and duration of FSH injections and the number of mature follicles. Serum and FF AMH concentrations were correlated with the number of retrieved oocytes (total & mature) and embryos (total & grade A).

Results: The baseline mean ± SD serum and FF AMH concentrations were significantly (p=0.005 & 0.028 respectively) higher in the PCOS group (4.4±0.4 & 5.5±0.3 ng/ml respectively) *vs.* the control group (2.8±0.3 & 4.3±0.4 ng/ml). There was no difference in serum or FF AMH concentrations between pregnant and non-pregnant patients in either group. There was a strong positive correlation between serum AMH and FF AMH concentrations in the PCOS (r, .831, p<0.001) and the control groups (r, .660, p=.01). No correlation was found between serum AMH concentrations and the total dose or duration of FSH treatment or the number of mature follicles in either group. In the PCOS group, there was a trend towards negative correlations between serum and FF AMH concentrations and the number of oocytes (total & mature) & embryos (total and grade A). The negative correlation was only statistically significant between serum AMH and the total number of oocytes (r,-.430; p=.041). In the control group, there was a trend towards positive correlation between serum and FF AMH concentrations and the number of oocytes (total & mature) & embryos (total and grade A). The correlation was statistically significant between serum AMH and the total number of embryos (r, .679, p<.001) and between FF AMH concentrations and the number of embryos (total, r=.694, p<.001 and grade A, r=.595, p=.03).

Conclusion: Whilst rising serum and FF AMH appears to be associated with a decline in the number of oocytes and embryos in PCOS women, it seems to be associated with an increase in oocytes and embryos in non-PCOS women. However, the effect of rising AMH on oocytes and embryos does not appear to affect the pregnancy rates.

Key Words: PCOS, Antimullerian hormone, IVF.

THURSDAY, December 13th, 2012:

SESSION (6): (Salle C) (15.15-17.00)

GENERAL GYNECOLOGY

(25) OOCYTE QUANTITY AND QUALITY: BASES FOR CONFUSING ART OUTCOME AND WOMEN'S FECUNDITY.

Prof. Dominique de Ziegler, France.

(26) THREE D US AND UTERINE ANOMALIES.

Prof. Botros Rizk, USA.

(27) SUCCESSFUL AGING FOR WOMEN.

Prof. Hassan Nasrat,
Professor of Obstetrics and Gynecology
Faculty of Medicine - King Abdul-Aziz University, Saudi Arabia.

Societies like human ages. The development in almost all aspects of life, social, hygienic, medical …etc. have resulted in large proportion of the population being in the "ageing sector". This has significant impact on several aspects: social, political, medical and economic…etc.
There is some gender variation in the issue of ageing some are biological and others are social and cultural. Women tend to shows more obvious changes at earlier age with the decline in ovarian function. On the other hand they tend to live longer than men.
As Gynecologists, we are very often if not always "primary health care physicians" to our patients. Hence we have an important role to ensure that their inevitably prolonged life is a healthy and productive one. For that purpose we need to be aware of what are effective measures or interventions we should provide.

(28) STUDY OF BONE MINERAL DENSITY AMONG LONG-TERM USERS OF DMPA AS AN INJECTABLE CONTRACEPTIVE.

Prof. Dr. Mohamed Salama Gad, Dr. Zakaria Fouad Sanad & Dr. Hebat-Allah El Batta,
Menofiya University.

Introduction: DMPA has been widely used as a long-term reversible method of contraception for the past 30 years. Most women who use DMPA have

hypoestrogenism. Estrogen deficiency is consistently associated with bone loss, especially in young women

Aim of work: to study bone mineral density among long-term users of DMPA as a contraceptive method compared with matched non-users.

Setting: Menoufiya University Hospitals (from April 2010-November 2011).

Patients & Methods: Sixty women had included

10 DMPA users aged 22-25y (to study the effects before attainment of peak bone mass)

20 DMPA users aged 35-45y who commenced use after 33y (to study effects after attainment of peak bone mass) and

30 women who had never used DMPA or other hormonal contraceptives individually matched to DMPA users by age, parity, body mass index and smoking habits.

DEXA scanning of the left femur, left forearm and lumbar vertebrae was done for measuring bone mineral density (g / cm^2) using DEXA-GE device from General Electric Company in America. T score was used according to the WHO definitions

Results: The mean BMD at lumbar spine, femoral neck and forearm in DMPA users was significantly lower than that in nonusers ($P<0.05$). Moreover, the number of women with osteopenia at lumbar spine, femoral neck and forearm in DMPA was significantly higher than that in nonusers ($P<0.05$). There was a significant negative correlation between age and bone mineral density at lumbar spine among DMPA users ($r = -391$, $P<0.05$).

Conclusions: 1-Long term use (>2 years) of DMPA causes skeletal health disorder. Increasing age and parity are confirmed risk factors. 2-Occurrence of osteoporosis may be considered in perimenopausal women or in women above 40, when using DMPA for long duration (2-5 years). 3-BMD and /or bone turnover markers are advised before starting DMPA and every 6 months after use especially in risky women.4-Further randomized multicenteric studies are needed to evaluate the idea of this study on a wide scale manner.

Recommendations: 1-Before starting (DMPA) as a means of contraception

(a) we must discuss the potential for decreased bone mineral density,
(b) also on the same time ,it is better to order a (DEXA) scan to evaluate a patient's risk,
(c) It is better not to use DMPA f0r more than 2 years, otherwise consider prescribing estrogen replacement.

2-It is recommended to women that they take 1300 mg of calcium and 400 IU of vitamin D daily when using DMPA.

Keywords: DEPA, contraception, bone mineral density, osteoporosis

(29) PELVIC FLOOR DYSFUNCTION (PFD) OR A BETTER TITLE IS "PELVIC ORGANS DYSFUNCTION (POD)" AND RECONSTRUCTIVE SURGICAL REPAIR.

***Abdel Karim M. A. El Hemaly FRCS-MRCOG, Ibrahim M. Kandil MD, Laila A. E. S. Mousa MD & Ahmad G. Serour MD.**

Introduction: Urinary continence depends on high urethral pressure gained by two factors; high wall tension due to the collagen layer constituent of the internal urethral sphincter. In addition, it depends on an acquired behavior gained by learning and training in early childhood how to keep high alpha-sympathetic tone at the IUS maintaining its closure all the time until there is a need or a desire to void.

We put a novel concept on the physiology of defecation.

We can divide the process of Defecation into 2 stages. The first stage, in infancy and early childhood before training: as the rectum is full, sensation of fullness travels along the pelvic para-sympathetic to the spinal cord (S. 2, 3 &4). Then efferent excitatory para-sympathetic impulses cause rectal muscle contraction pushing the rectal contents to the anal canal where the external anal sphincter relaxes finishing the defecation. Then the mother starts to teach her child how to hold up himself until social circumstance allow. Then we gain the second stage by keeping high alpha-sympathetic tone at the internal anal sphincter (IAS) maintaining its closure all the time until there is a need or a desire to empty and social circumstances allow. Sensations of rectal distension travel along the pelvic para-sympathetic nerves to the CNS. Controlled by the high CNS centers, the person has the choice to retain or empty rectal contents according to social circumstances available. If he chooses to empty, this will be either for a moment only to release flatus, or for a longer time to pass stool. When social circumstances allow passage of stool, then six synergistic neuro-muscular actions take place. The IAS is a cylinder of collagen-muscular tissues that surround the anal canal, innervated with alpha-sympathetic nerves from T10-L2.

The vagina is a cylinder of collagen-elastic-muscular tissues. The strong tough collagen sheet is the one responsible for the upright position of the vagina. Childbirth trauma injuries the collagen layer due to overstretching of the vagina and leads to flabby and redundant vaginal walls with subsequent vaginal prolapse. It will also leads to lacerations in the IUS, and IAS leading to their weakness and cannot stand against rise of abdominal pressure.

Objective: By imaging with 3-dimension ultrasound (3DUS); MRI and by histopathology studies, we try to prove these three novel concepts.

Materials: We chose three hundreds women suffering from stress urinary Incontinence (SUI), fecal incontinence (FI) and vaginal prolapse. In addition, we included 30 nulliparous infertile women who have no pelvic floor dysfunction as control.

Methods: All patients and control were having their clinical history recorded, and were clinically examined and had been imaged with 3DUS and MRI. In addition, we took specimens from the IUS, IAS and the vagina and were prepared, examined microscopically, and compared to normal tissues.
Results: Imaging with 3DUS and MRI proved the novel concepts and histopathological examinations proved that the IUS, IAS are cylinders of collagen-muscle tissues that surround the urethra and the anal canal. Rupture of the collagen layer lead to weakness of the sphincters and SUI and FI ensues.
In addition, rupture of the collagen layer of the vagina leads to vaginal prolapse.
Conclusion: Pelvic organs dysfunction is the main factor that leads to SUI, FI and vaginal prolapse, and not pelvic floor dysfunction. In addition, more than one trouble can be present in the patient simultaneously.

Corresponding Author:
ABDEL KARIM M. EL HEMALY. MRCOG-FRCS. Prof. ObGyn.
Al Azhar University, Faculty of Medicine.
3 Emad El Din Kamel St. Nasr city,
Post No. : 11371
Cairo, Egypt.
E-mail : profakhemaly@hotmail.com
Telephone : +202 22607085 - +202 24011780
Mobile Phone : +202 0100 1577969 Fax: +202 25893755

(30) SEXUALITY ASPECTS OF MARITAL LIFE: A QUALITATIVE STUDY FROM EGYPT.

Ahmed Ragaa, A. Ragab*, Mawaheb T. El-Mouelhy**

* Professor of Reproductive Health. International Islamic Center for Population Research and Studies, Al-Azhar University, ** Consultant in Population and Reproductive Health. Medical Advisor, Cairo Family Planning and Development Association.

Introduction: Sexual and reproductive health and well-being are essential if married people are to have responsible, safe, and satisfying sexual lives. Sexual health requires a positive approach to human sexuality and an understanding of the complex factors that shape human sexual behaviour. Understanding the perception of married couples regarding sexuality aspects helps in designing programs for pre-marital counseling and examination.
Methodology: The current paper addresses married couple's perspectives regarding sexuality aspects of marital life. It is a part of a recent qualitative study entitled "Investigating Women Sexuality in Relation to FGM in Egypt", conducted in Egypt in three sites in two governorates (Cairo and Minya). Participants were

men and women in different age cohorts (less than 35 and more than 35, community leaders, local religious leaders, and health providers.

Findings: Both men and women saw the importance of sexual pleasure as part of marital happiness in different ways, while women saw sexual pleasure in a wider context such as *"a caring and kind husband", "happy children", "economic needs are fulfilled"*, men saw sexual pleasure that is derived from the sexual act as a corner stone in their marital happiness as one man put it *"Why would I marry then?"*.

It was generally considered, in the current study, unacceptable for women to make direct overtures, this is considered a *"shame"* and *"ill behavior",* sex initiation is almost always a male's role. Women who want to invite their husbands to initiate sex may resort to some indirect tactics like *"prepare a good meal*", *"dress in special clothes",* or *"walk in a special way",* the rest is then up to the husband. According to the study findings, in these communities, women may not refuse their husbands' request to have sex even when the woman is not in the mood. Men and women in the focus group discussion sessions, based this on religious and social. According to local formal health care providers, sexual problems among couples existed in these communities, and they said that some of the couples blamed circumcision for that.

Conclusion: It is clear from the study that programs for pre-marital counseling and examination should include sexuality aspects in their programs. This might ensure reproductive and sexual rights for couples willing to live happy marital life. In addition, appropriate reproductive and sexual health education should be included in formal and non-formal education programs. As the study had shown, female circumcision might affect sexuality aspects of marital life and consequently, efforts should be intensified to eradicate it, as it has no health value.

FRIDAY, December 14th, 2012:

SESSION (7): (Salle A) (9.15-12.00)

PLENARY SESSION (3)

(31) PAIN, NERVES AND ENDOMETRIOSIS.

Prof. Vincent Anaf, Belgium
Dept Of Gynecology,Hospital Erasme
Free University Of Brussels, Ulb, Brussels Belgium,

Endometriosis is defined as the presence of endometrium and stroma outside of the uterine cavity; the most frequent localizations are the peritoneum and the ovaries. Deep infiltrating endometriosis (DIE) is classically defined as the presence of endometriosis more than 5 millimeters under the peritoneum.

From the histological point of view, these lesions represent endometriosis, but are associated with an important smooth muscle hyperplasia and also an important fibrosis. These lesions can affect the large bowel, the sacrouterine ligaments, the bladder, the ureter .and are strongly associated with pain by means of severe dysmenorrhea, deep dyspareunia, chronic pelvic pain and specific symptoms according to the affected organ.

The type of pain in DIE is very often hyperalgesic and presents the characteristics of neuropathic pain. Neuropathic pain represents an intense pain sensation which is disproportionated with the intensity of the pain stimulus. It is classically associated with a nerve lesion or inflammation.

The intensity of pain of affected patients by DIE usually requires high doses of analgesics and NSAIDs and can have important repercussions on professional life (work absenteeism), everyday life and sexual life.

In DIE there a close histological relationship with retroperitoneal nerve structures and with the nerves of the affected organ. In rectovaginal and Douglas pouch lesions, we have found a close histological relationship between the endometriotic lesion and the nerve strucrtures (by means of perineural and intraneural invasion) and the intensity of pain seems to be correlated with the number of invaded nerve structures or nerves entrapped in fibrotic tissue.

Similarly, in the large bowel, endometriotic lesions preferentially invade the large bowel wall along the nerve pathways of the Meissner's and Auerbach's plexus.

DIE expresses the NGF which is a neurotrophin that plays a key role in the occurrence of hyperalgesia and neuropathic pain. Moreover retroperitoneal nerves express the specific receptor for NGF (Trk-A). Therefore the activation of the couple < NGF-NGF specific receptor > could be responsible for the tissular chemotactism between tissues expressing NGF and the nerves that express the specific receptor for NGF. The activation of the couple < NGF-NGF specific receptor > could explain the occurrence of hyperalgesia in DIE and also that DIE is almost always located in richly innervated organs (colon, bladder, uterosacral ligaments, rectum.) and not elsewhere.

Another major source of NGF are mast cells. It has been demonstrated that mast cells are significantly more abundant in DIE than in non affected tissues as well as in peritoneal and ovarian endometriosis.

There is cumulative evidence that mast cells play an important role in the pathogenesis of chronic pain and neuropathic pain in many pathological conditions. Mast cells can not only release mediators that increase excitability of neurons, but in turn, neurotransmitters such as substance P or NGF can trigger mast cell degranulation.

These findings of histological relationship between DIE and nerves, the presence of nerve lesions caused by endometriosis and the interaction between nerves, neurotrophins and mast cells might raise the possibility of further new pain treatment modalities acting on these components of DIE.

S-100 immunohistochemistry showing the infiltration of a nerve by endometriotic stromal cells.

(32) NEW MEDICAL TREATMENTS FOR ENDOMETRIOSIS.

Prof. Felice Petraglia, Italy.
Serena Pinzauti, Stefano Luisi, Lucia Lazzeri, Claudia Tosti, Gabriele Centini, Errico Zupi and Felice Petraglia

Obstetrics and Gynecology, Department of Molecular and Developmental Medicine University of Siena, Siena, Italy

Endometriosis is commonly treated throughout surgery, although conditions requiring a medical treatment are: 1) in case of or for reducing recurrence; 2) non-feasibility of surgery; 3) treatment of the initial stages. Indeed, endometriosis should be viewed as a chronic disease that requires a life-long management plan.

The current medical treatments are based on hormonal therapies for obtaining iatrogenic menopause (GnRH agonists) or pseudopregnancy (progestins or estroprogestins).

Drugs under development are GnRH antagonists and aromatase inhibitors. Indeed clinical trials on a novel oral GnRH antagonist or on aromatase inhibitors are currently going on in women with endometriosis and show significant effects on pain symptoms (dysmenorrhea, dyspareunia, pelvic pain). A new drug, dienogest, is a progestin with a substantial efficacy in pain reduction, both in comparison with placebo and with GnRH agonists, but with less adverse effects.

Moreover, non-hormonal therapies, such as inhibitors of neoangiogenesis (anti-VEGF, dopamine agonists) and pro-apoptotic agents (statins) are effective in the treatment of endometriosis, reducing growth and invasiveness of ectopic endometrial tissue in animals. Reducing inflammation and damage associated with oxidative stress, antioxidants (omega-3 fatty acids) show benefits for the treatment of pelvic pain associated with endometriosis.

(33) OBESITY AND ITS IMPACT ON REPRODUCTIVE HEALTH.

Prof. Hassan Nasrat,
Professor of Obstetrics and Gynecology
Faculty of Medicine - King Abdul-Aziz University, Saudi Arabia.

Obesity is worldwide epidemic. It is probably the most potentially preventable health hazard with the greatest direct impact on individual health. At society level treatment of obesity related complications constitute a huge consumption of nation's budget.

The prevalence of obesity in women of reproductive age continues to increase. The efficacy and effectiveness of all modalities of infertility treatment is reduced by obesity. Pregnancy and pregnancy outcome is also adversely affected by obesity. In this presentation the focus is on the impact of obesity on reproduction particularly in women.

The management of obesity requires multidisciplinary approach. Although lifestyle modification alone can induce significant metabolic improvement, resumption of ovulation and reduction of perinatal risks, greater weight loss, and therefore greater potential benefit, can be achieved in combination with pharmacological agents or bariatric surgery.

(34) PITFALLS IN THE MANAGEMENT OF AZOOSPERMIA.

Dr. Khaldoun Sherif, Jordan.

Azoospermia affects 5% of investigated infertile men. Originally it was thought to be an untreatable form of infertility, but with the advent of surgical sperm retrieval (SSR) and ICSI, many of these men are now successfully treated. However, as not

uncommon in medicine, the wide availability of a successful treatment can lead to it use in unsuitable cases. There is now considerable body of evidence indicating that SSR and ICSI are being used inappropriately. The proper use as well as the various forms of abuse of treatments for azoospermia will be discussed in the presentation.

(35) Can we improve implantation by cancelation of fresh embryo transfer

Safaa Al- Hasani,
Reproductive Medicine Unit. University of Schleswig-Holstein at Luebeck, Ratzburger Alle 160, 23538 Luebeck, Germany.

Single embryo transfer is becoming increasingly popular in IVF/ICSI. More IVF/ICSI cycles therefore include freezing of high quality embryos, and the cumulative effect of such cycles becomes more important. To improve the results obtained using frozen-thawed embryos, the predictive value of embryo and patient characteristics such as ovarian reserve, hormone levels and age play an important role in both cases whether the women treated with oestradiol/progesterone or undergo natural cycle transfer. Although, embryo quality indicators revealed sometime morphologically and numerically inferior embryo cohorts after cryopreservation, the clinical pregnancy rate is higher in cycles using thawed embryos compared with fresh. Moreover, subsequent logistic regression analysis controlled for differences in embryo quality and revealed significantly greater probability of clinical pregnancy with thawed embryos when compared with fresh, suggesting a negative effect of ovarian stimulation on endometrial receptivity. The aim of this study is to discuss an idea of cancellation of a fresh embryo transfer and put on an alternative method which is the frozen thawed embryo.

(36) PRONUCLEAR TRANSFER IN ICSI PATIENTS: OUR EXPERIENCE AT THE OB/GYN DPT UNIVERSITY OF ROME "SAPIENZA", ITALY.

Prof. Cesare Aragona, Italy.

FRIDAY, December 14th, 2012:

SESSION (8): (Salle A) (12.30-14.00)

EGYPTIAN REPRESENTATIVE COMMITTEE (ERC) OF THE ROYAL COLLEGE (RCOG)

(37) OUT-PATIENT HYSTEROSCOPIC RESECTION OF UTERINE SEPTUM.

Dr. Ahmed Mostafa Fouad, Egypt.

(38) UTERINE ARTERY HAEMOSTASIS: PERMANENT, TRANSIENT AND TEMPORARY.

Prof. Amr El Noury, Egypt.

(39) ADOLESCENT PREGNANCY ADVERSE EFFECTS, IS IT EVIDENCE SUPPORTED?

Dr. Wafaa B. Basta, Egypt.

(40) CLOMIPHENE CITRATE ALTERNATIVES FOR INITIAL MANAGEMENT OF POLYCYSTIC OVARY SYNDROME; AN EVIDENCE BASED APPROACH.

Prof. Hatem Abu Hashim. MD. MRCOG.
Professor of OB/GYN -Faculty of Medicine – Mansoura University.

Background: Clomiphene citrate (CC) is considered the standard first line treatment of Polycystic Ovary Syndrome (PCOS). However, in the last few years, different studies tried to find other alternatives as gonadotrophins, laparoscopic ovarian drilling, metformin and aromatase inhibitors
Aim: To review the available evidence with respect to CC alternatives for initial management of PCOS.
Methods: A literature search was performed regarding women with infertility mainly looking for guidelines, systematic reviews and randomized controlled trials (RCTs) followed by other levels of evidence.
Conclusion: At this presentation critical appraisal of the available evidence regarding these alternatives will be presented.

(41) UTERINE ARTERY EMBOLISATION FOR FIBROIDS. BRISTOL'S EXPERIENCE.

Mr. Ali Ahmad Maher, UK.

FRIDAY, December 14th, 2012:

SESSION (9): (Salle B) (12.30-14.00)

OVARIAN HYPERSTIMULATION AND IMPLANTATION

(42) IMPROVING EMBRYO IMPLANTATION.

Dr. Ragaa Mansour, Egypt.

(43) PREIMPLANTATION GENETIC DIAGNOSIS AND NEW STRATEGIES FOR GENETIC SCREENING OF EMBRYOS.

Mamdoh Eskandar FRCSC
Professor of Obstetrics and Gynecology &ART
King Khalid University
Abha, Saudi Arabia

Preimplantation genetic diagnosis (PGD) is a very early form prenatal diagnosis that enables couples to commence a pregnancy with the knowledge that their embryos are not affected with a serious genetic disease. One advantage of PGD over prenatal diagnosis is that it avoids the very difficult issue of termination of pregnancy when the baby is affected with a genetic disease. PGD is intimately linked to IVF and involves the genetic testing of embryonic cells taken by an invasive biopsy procedure and transfer of unaffected embryos back to the woman's uterus for implantation. The main indication for PGD is unsuccessful IVF treatment, particularly for couples of advanced maternal age who have unexplained infertility. In this procedure, known as aneuploidy testing, embryo biopsy samples are analysed by fluorescent in situ hybridization (FISH) for numerical changes in 5-9 chromosomes commonly involved in spontaneous abortions. Fertile couples at genetic risk of conceiving a child with a single gene disorder such as sickle cell anaemia are also increasingly accessing PGD as an alternative to chorionic villus sampling or amniocentesis. In these cases, PCR tests are designed specifically to diagnose the known paternal and maternal mutations identified by prior DNA testing.
The greatest potential problem for diagnostic accuracy of PGD may be contamination from nonembryonic DNA. Such contamination can arise from numerous sources and can be more disastrous than PCR failure, or other technical considerations. For example, PCR failure will prevent a particular embryo from being transferred; however, contamination could allow an affected embryo to be transferred by providing a false negative result.

(44) THE USE OF HYDROXYETHYL STARCH (HES) FOR PREVENTION OF OVARIAN HYPERSTIMULATION SYNDROME ON 2nd and 5th DAY OF RETRIEVAL: NOVEL PROTOCOL.

Mohamed Tawfik El Sherbiny, Hafez Abd Elbaky Gewely, Yomna Mohamed El Sherbiny and Ahmad Mohamed El Sherbiny. Integrated Fertility Center Damietta.

Different strategies have been proposed for the prevention of ovarian hyperstimulation syndrome (OHSS) in high-risk patients. Coasting was by far the most popular preventive choice during stimulation. The use of albumin, HES or cabergoline at the time of oocyte retrieval or embryo cryopreservation were the preventive methods after hCG injection. Unfortunately all these approaches do not offer complete prevention of OHSS.
Vascular endothelial growth factor (VEGF) the main vasoactive intermediate for OHSS was observed to peak at the 2nd and the 5th day after retrival and then with the high permeability activity at OHSS ascites. Albumin and HES were usually given at the time retrieval which is much earlier than the peaks of the VEGF which may explain their conflicting results of effect
Objective: To compare Coasting with that of i.v. hydroxyethyl starch (HES) on second and fifth day of retrieval in prevention of ovarian hyperstimulation syndrome (OHSS) in high-risk patients.
Design: Randomized clinical trial.
Setting: Integrated Fertility Center Damietta (IVF Center), Egypt.
Patients: A total of 104 women undergoing IVF or IVF with ICSI treatment cycles who were considered to be at high risk for developing OHSS between January 2007 and Jun 2012. Patients were considered at risk of developing OHSS when they had: a total of >20 follicles on both ovaries (majority<14 mm) at stimulation with estradiol level >3000 pg/ml.
Interventions: During ovarian stimulation with the long GnRH protocol, women at risk of OHSS were randomly allocated to Costing group (n.:52) and HES Group (n. 52). Coasting was started when the leading follicle reached 16 mm and continued until the estradiol (E2) level fell to 3000 pg/ml. Outcomes were compared to HES group that included 51 patients at risk for OHSS who were followed to retrival then were received i.v.500 ml 6% HES /12 hours for 24 hours on the second and fifth day of retrieval (HES Group).The dose was continued for another 24 hours for those who developed ultrasonic evidence of impending ascites.
Outcome Measures: Main outcome measures were incidence of moderateand severe OHSS and need for hospitalization. Secondary outcome measures were the number of oocytes, the number of fertilized oocytes, cryopreserved embryos and pregnancy rate.
Result: There was no significant difference of moderate or severe OHSS, and the incidence of hospitalization between the coasting and HES groups (7.6 Vs 1.8%p,1.9 Vs 0% ,7.6 Vs 0% respectively ;P >0.5).However there were

significantly higher number of oocytes (19.2 ± 6.9 Vs 13.2 ± 5.4;P=0.0001), MII oocytes (15.2 ±5.8 Vs 9.6 ± 4.5; P=0.0001), fertilized oocytes (10.1 ± 5.7 Vs 6.6 ± 4.0; P =0.0001) and cryo-preserved embryos (5.8± 2.9Vs 3.01 ± 2.75 ; P=0.0001) in HES group compared with coasting group. The clinical pregnancy rate was higher in HES than coasting group but the difference was statistically insignificant (45.2Vs 41.1%; P=0.552).

Conclusions: HES was superior to coasting in producing significantly higher number of oocytes, fertilized oocytes, cryopreserved embryos. There was no significant difference in the incidence of moderate or severe OHSS and need for hospitalization.

(45) USEFULNESS OF DAY-3 INHIBIN-B LEVELS FOR PREDICTING THE RESPONSE TO CONTROL OVARIAN STIMULATION (COS) IN PCOS.

Hanadi ABUALLELA, Dominique DE ZIEGLER, Chadi YAZBECK. France.

Background*:* The Ovarian response to COS is notoriously unpredictable in PCOS despite adjusting the initial dose of FSH according to AMH and AFC score. We conducted retrospective analysis to investigate whether day 3 inhibin B levels might add a predicting value in PCOS women. *Methods:* COS was initiated in 77 PCOS women using a classical low-dose step-up protocol using rFSH and a starting dose adjusted according to basal AMH levels. PCOS was diagnosed according to the Rotterdam criteria. Basal serum inhibin B, AMH, FSH, LH and estradiol were measured prior to COS on day 3 of naturally occurring or progestin-induced menses. Correlations between basal inhibin B and COS outcome were determined.

Results*:* Mean basal serum levels of inhibin B were estimated at 66.3 ± 6.7 pg/ml, and of AMH at 9.5 ± 1.0 ng/ml. Two groups of patients were identified according to cutoff levels of inhibin B (less or greater than the normal range: 45 pg/ml) and AMH (less or greater than the 50th percentile: 7.5 ng/ml). The frequency of cycle cancelations was higher in the low-Inhibin B group than in the normal-Inhibin B group (33.3% versus 10.6%; p=0.03) whereas the frequency of ovarian hyperstimulation syndrome (OHSS) was lower in the low-Inhibin B group than in the normal-Inhibin B group (0.0% versus 14.0%; p=0.036). Significant positive correlations were also observed between basal Inhibin B levels and the total number of oocytes retrieved (r=+0.55; p<0.001) and embryos obtained (r=+0.49; p<0.001). However, duration of controlled ovarian hyperstimulation (10.2 ± 0.5 versus 9.9 ± 0.4 days; p= 0.63) and pregnancy rates were similar between groups.

Stimulation day-1 FSH dose was lower in the high-AMH group than in the low-AMH group (141.4 ± 8.3 versus 172.8 ± 8.3 IU; p=0.01). Consequently, no differences were observed in peak estradiol levels or the duration of the stimulation between groups. The frequency of cycle cancelations for was slightly

higher in the high-AMH group than in the low-AMH group (28.1% versus 10.5%; p=0.057). However, the number of embryos obtained and pregnancy rates were similar between groups.
Conclusions: Low day-3 levels of inhibin B predicts lower responses to COS with higher risk of cycle cancelations for inadequate response. The ovarian response to gonadotropins increased significantly with day 3 serum inhibin B levels in women with PCO. Therefore, taking day-3 inhibin B levels for adjusting the initial dose of gonadotropin appears warranted for optimizing COS responses in ART.

(46) MANAGEMENT OF RECURRENT IMPLANTATION FAILURE.

Dr. Khaldoun Sherif, Jordan.

A number of infertile patients undergo repeated unsuccessful IVF cycles despite the transfer of good quality embryos. This is termed unexplained recurrent implantation failure, and is currently one of the vexing problems in modern IVF practice. A wide range of options are employed in clinical practice to deal with the problem, but only a few of them have been proven beneficial in randomized trials, and these will be discussed in the presentation.

(47) MAXIMIZING FERTILITY IN APPARENTLY NORMAL COUPLES.

Dr. Mahmoud Shawer, Egypt.

"We are married for 4 years. My husband works abroad and comes home one month every year. He is coming next month" Says the apparently infertile patient with agony. "If he leaves this time, he will not be back home before another year. All our friends and younger relatives, now have children."

One month infertility equals one year infertility and agony. It is a problem peculiar to our country. Fertility is of utmost importance to Egyptians for many social and economic reasons. The problem is serious and needs to be addressed at all levels as millions of Egyptians work away from their wives. Fecundity is usually <20% per month. Maximizing fertility may double that rate.

FRIDAY, December 14th, 2012:

SESSION (10): (Salle C) (12.30-14.00)

IVF/ICSI

(48) PRINCIPLES OF ESTABLISHING A NEW IVF LAB.

Prof. Safaa Al-Hassani, Germany.

(49) BLASTOCYST TRANSFER IN ICSI.

Prof. Dr. Ahmed Abdel Aziz Ismail,
Alexandria University.

The first IVF human pregnancy was achieved by blastocyst transfer [BT]. It is claimed to be more physiological than pronucleate or cleaved-embryo transfer is as it mimics nature more closely.
It has been found that;
•BT improves implantation and live birth by selecting the best embryo.
•40 % of patients will not grow to Blastocyst stage; for those we can do "Embryo – Banking "
•BT is recommended in:
repeated ICSI failure or ,
to avoid multiple pregnancy
•Thawing, revitrification and biopsy of Blastocyst did not affect implantation & live birth rates.
•Blastocyst derived from frozen- thawed cleavage stage embryo improved ongoing pregnancy.
There is a need for development of approaches that may assist in the early detection of embryos destined to develop into blastocysts. Moreover,
there are continuous innovations and fine tuning in ART to improve the results.

(50) MORPHOLOGICAL AND MATHEMATICAL ANALYSIS OF ICSI EMBRYOS AND DEVELOPMENTAL FATE: PRELIMINARY OBSERVATIONS.

Prof. Cesare Aragona, Italy

(51) FACTORS AFFECTING THE OUTCOME OF HUMAN BLASTOCYST VITRIFICATION.

ELDEEB M W, ***ORIEF Y*, SAID S, DARWICH Y, SALLAM A , ABUSHAER M, ISMAEL E***

INTEGRATED FERTILITY CENTER, ALEXANDRIA.
*FACULTY OF MEDICINE, ALEXANDRIA UNIVERSITY.

With single blastocyst transfer practice becoming more common in ART, there is a greater demand for a convenient and reliable cryostorage of surplus blastocysts. Vitrification has emerged in the last decade as an alternative promising substitute for slow freezing. Blastocysts represent a unique challenge in cryostorage due to their size, multicellular structure and presence of blastocoels. The continuous acquisition of experience and introduction of many different technological developments has led to the improvement of vitrification as a technology and improved the results of its application in blastocyst cryostorage. The current information concerning safety and efficacy of the vitrification of blastocysts will be reviewed along with the variables that can impact the outcome of the procedure.

(52) THE OPTIMAL FINAL OOCYTE MATURATION TRIGGER IN GNRH ANTAGONIST CO-TREATED IVF/ICSI TREATMENT CYCLES. SYSTEMATIC REVIEW & META-ANALYSIS

Dr. Mohamed Abdel Fattah Yousef, Egypt.

Introduction: Final oocyte maturation in GnRH antagonist co-treated IVF/ICSI cycles can be triggered with HCG or a GnRH agonist. **Material & Methods:** We conducted a systematic review & meta-analysis of randomized and prospective cohort trials to evaluate the efficacy and safety of GnRH agonist & HCG as optimal triggerers in GnRH antagonist co-treated cycles in fresh autologous cycles, oocyte-donor cycles and freeze all and transfer later cycles. **Primary outcome**: ongoing pregnancy rate. **Secondary outcomes**: OHSS incidence. **Searches:** (though Jan. 2012) were conducted in MEDLINE, EMBASE, Science Direct, Cochrane Library and databases of abstracts.**Results:** There was a statistically significant difference against the GnRH agonist with an OPR in fresh autologous cycles (n=1024) of, OR: 0.69; 95% CI: 0.52 -0.93 . In oocyte - donor cycles (n= 342) there was no evidence of a difference (OR: 0.91; 95% CI: 0.59 -1.40,). Two prospective cohort studies evaluated the freeze all strategy with later embryo transfer in women at high risk to develop OHSS, The cumulative ongoing pregnancy rate was 37.3% (95% CI 25.3%–51.0%) & 36.8% (95% CI: 19.1–59.0) in comparison with 20% in fresh autologous cycles transfer with an almost two fold increase in pregnancy rate (OR: 2.37, 95% CI: 1.3- 4.07). There was a statistically significant difference in favor of GnRH agonist regarding the incidence of OHSS in fresh autologous (OR: 0.06; 95% CI: 0.01 -0.33 & donor cycles respectively (OR: 0.06; 95% CI: 0.01 -0.27). *As regards the proper timing of HCG administration in GnRH antagonist co-treated cycles, there was no evidence of statistically significant difference between early or late HCG administration as regards the ongoing pregnancy rate (2 RCTs, OR: 1.31, 95% CI: 0.90 -1.91), meanwhile there was a lower number of oocytes retrieved in early administration group (2 RCTs, MD= -1.20, 95% CI: -1.30 to -1.10). As regards*

the suitable dose of HCG for final oocyte maturation triggering, there was no evidence of statistically significant difference between the traditional dose (10.000IU) or a lower dose (2500-5000 IU) in the form of OPR with OR of 0.75, 95 % CI: 0.27 – 2.12), meanwhile, there was a lower number of oocytes retrieved at a lower dose HCG group (MD = -2.50, 95 % CI: -3.79 to -1.21). **Conclusion:** HCG administration at an earlier day (follicular size ≤ 16-17mm) and a lower dose (< 10.000IU) than the traditional HCG regimen used seems to be an optimal trigger for final oocyte maturation in GnRH antagonist co-treated IVF/ICSI treatment cycles. Conversely, GnRH agonist as a trigger seems to be safer than traditional HCG due to the associated low risk of OHSS. Moreover, a freeze all strategy seems to be an alternative option for patients at high risk to develop OHSS with a relatively better pregnancy rate, but randomized controlled studies on this issue are still lacking.

(53) INTRACYTOPLASMIC SPERM INJECTION IN FOUR CASES OF MEDITERRANEAN FEVER.

Dr. Tamer Said, M.D. RDMS[a],
[a] Department of obstetrics and gynecology, Alexandria University, Egypt

Objective: To review our data about assisted reproduction in patients with Mediterranean fever.
Design: Case series and all of them were diagnosed to have Mediterranean fever and had one or more cycles of intracytoplasmic sperm injection.
Setting: Two private IVF centers
Patients: Four cases diagnosed with Mediterranean fever
Intervention, results and discussion: The first case was 31 years old and she had tubal factor infertility (bilateral hydrosalpix and persistent free fluid in peritoneal cavity) and she received long agonist protocol and 19 oocyte were retrieved. Embryo transfer of 4 grade A (6-8 cells) was done and no pregnancy occurred. Laparoscopic tubal ligation was tried but conversion to laparotomy was done because of extensive adhesions found during laparoscopy. Five months later, frozen embryos transfer of 2 grade A embryos was done and pregnancy was confirmed by beta-hCG.
The second case was 24 years old and had peritubal adhesions and oligoasthenospermia. She had intracytoplasmic sperm injection done. She had long agonist protocol and 14 oocytes were retrieved and 5 embryos were transferred. The patient had to take colchicine as she had severe pelvic and abdominal pain after retrieval. No freezing done according to the wish of the couple. No pregnancy occurred in this cycle. Two months later, laparoscopic tubal ligation was done. Another trial of ICSI was done, Long agonist protocol was used. Retrival of 16 oocytes and embryo transfer of 3 Gr A embryos was done and the patient got pregnant in twin pregnancy.
The third case was 29 YO. She has normal HSG, normal ovulation and mild male factor (oligospermia) she had 3 IUI and failed. She has history of unexplained

recurrent abdominal pain not related to the menses. She was diagnosed to have Mediterranean fever and started colchicine. She had ICSI done twice. The first ICSI a long agonist protocol was used and only 2 follicles retrieved and transfer of 1 embryo was done on day 2 and no pregnancy occurred. The second ICSI was done using antagonist protocol and six oocytes were retrieved and 3 Gr A day3 embryos were transferred. No pregnancy occurred. The patient had laparoscopic bilateral tubal ligation. Two months later, she had another ICSI. Antagonist protocol was used. Seven oocytes were retrieved and three embryos day 3 Gr. A and B were transferred. The patient got pregnant.

The last case was 27 years old. She has unexplained infertility for 6 years. The Mediterranean fever was diagnosed accidently. During US examination, large amount of pelvic and peritoneal collection was found. Referral for internist was done. She was diagnosed to have Mediterranean fever. She had 2 times IUI and one trial of ICSI but no enough data on them and all failed. The patient was counseled for tubal ligation and she refused. One trial of ICSI was done. Long agonist protocol was used and oocyte retrieval of 13 oocytes. Embryo transfer of 3 embryos and freezing of 6 embryos was done. She did not get pregnant. Two months later she had frozen embryo transfer and it failed also.

Conclusions: The study of these four cases confirms the abnormal peritoneal factor and abnormal tubal function that sometimes associated with unexplained infertility in these patients. Patients with unexplained recurrent abdominal pain and /or abnormal peritoneal collection should be screened for Mediterranean fever. It was also found that tubal ligation is a possible way to increase chances of success in these cases. We recommend a larger trial in order to have strong evidence weather tubal ligation improve pregnancy rate or not.

Key words: Mediterranean fever, Intracytoplasmic sperm injection, Infertility

FRIDAY, December 14th, 2012:

SESSION (11): (Salle A) (14.30-15.45)

PREGNANCY AND OBSTETRIC OUTCOMES

(54) PERINATAL OUTCOME AFTER ASSISTED REPRODUCTION: DATA FROM BELGIUM.

Prof. Willem Ombelet, Belgium.

Background Although the increased risk for perinatal morbidity and mortality of babies born after ART (assisted reproductive technologies) is largely attributed to a higher rate of multiple gestations, a significantly worse perinatal outcome for singleton pregnancies following ART compared to pregnancies after natural conception has been reported. Most studies report only IVF pregnancies despite the fact that non-IVF ovarian stimulation (OS) is the most commonly performed infertility treatment worldwide.

Methods In Flanders, the Study Centre for Perinatal Epidemiology (SPE) collects data on the medical and obstetric history, and on perinatal events of each hospital delivery in Flanders of more than 21 weeks of gestational age and ≥ 500 grams at birth. Full voluntary cooperation of all 80 obstetric departments in Flanders has been established since 1993. Flanders represents 53 % of all deliveries in Belgium. The main outcome measures were gestational age, birth weight, admission to the neonatal intensive care unit (NIC), perinatal mortality and perinatal morbidity including intracranial bleeding and assisted ventilation. Subgroup analyses were made between normal birth weight (> 2500 grams), low birth weight (LBW, < 2500 grams) and very low birth weight (VLBW, < 1500 grams) and between term (>37 weeks), preterm (< 37 weeks) and extreme preterm (<32 weeks) birth. Stillbirth was defined as the birth of a lifeless child of >500g, and neonatal death as the death of a live born child >500g within seven days after birth. Perinatal mortality rate was defined as the sum of stillbirths and neonatal deaths divided by the total number of live and stillbirths.

Statistics Since a number of factors differ significantly between groups, logistic regression methodology was used to properly correct for these. Logistic regression analysis included co-variables with a potential impact on perinatal outcome such as mode of conception, female age, fetal sex, parity and year of delivery. For the statistical analysis comparing perinatal outcome differences between IVF/ICSI, OS and NC births after adjustment for the different confounding factors, results were presented as odds-ratio (OR), 95 % confidence interval and its corresponding p-values. A difference at the 5 % level of significance was considered the threshold of probability.

Findings Investigating the period 1993-2010 data on 1,039,415 singletons (19,869 IVF/ICSI, 20,469 OS and 999,050 natural conception - NC) and 39,041 twins (9,353 IVF/ICSI, 4,812 OS and 24,876 NC) were available for analysis.

IVF/ICSI singletons had a significantly worse outcome when compared to OS and NC for almost all investigated perinatal parameters. Non-IVF OS singletons were also significantly disadvantaged for birthweight and prematurity when compared to NC. Considering the outcome of twin pregnancies: a signicantly higher rate of prematurity, low birth weight and intra-uterine death was observed in the NC-group compared to ART-twins. Prematurity and low-birth weight more often seen in ART-twins compared to NC-twins if unlike-sex twins were studied separately.
Interpretation, The present controlled study describes the perinatal results of the largest cohort of IVF/ICSI and OS births ever published. Multiple births alone do not explain a poorer perinatal outcome after assisted reproduction. ART-singletons are also at increased risk when compared to natural conception babies. Although IVF/ICSI singletons have the worse prognosis, OS singletons also carry a higher perinatal risk. For unlike-sex twins, results showed that both IVF/ICSI and OS pregnancies carry a higher perinatal risk compared to NC.

(55) BULGING MEMBRANES, A NEW METHOD IS BORN

Dr. Zaid Kilani, Jordan.
The Farah Hospital
Amman - Jordan

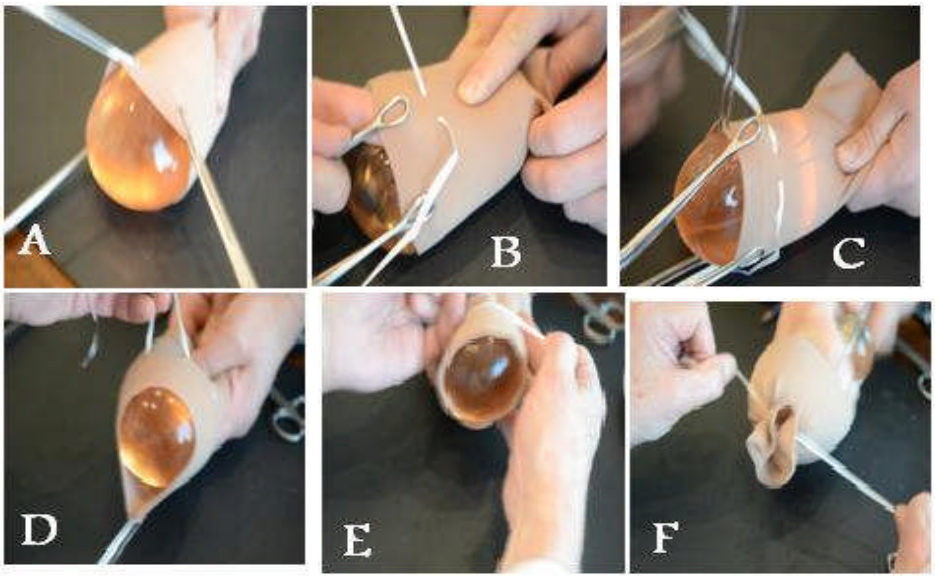
In this talk I am going to discuss a new method in dealing with emergency cervical cerclage, in bulging membranes.

Rescue cerclage with bulging membranes: The Farah Hospital experience

Since 1980, 28 cases of rescue cerclage procedure were carried out. At presentation, pregnancy ranged from 16-27 weeks and two cases were twins. In each case, membrane remained intact after the procedure. Most cases continued until after 34 week gestation with a 100% survival rate. One case miscarried after 3 weeks of the operation because of thrombophilia. No abnormality or intra-uterine fetal death was encountered.

Procedure:

The anterior lip of the already dilated cervix is grasped by one or two of ovum forceps, and pulled down towards the introitus (Fig. A). The cervical tissue is very stretchable like "a chewing gum" (Fig. A). The minute we have adequate length at the stretched cervix, needle loaded with mersilene tape goes through the cervix at 12 o'clock and continues to the right of the patient all around the cervix in burst-ring manner in about 4 bites about 12,3,6 and 9 (Fig. C). When the other edge of the tape appeared again about 1 cm lateral to the first starting point, both edges of the tape are pulled upwards (Fig. D). At this minute the bulging membranes is noticed to disappear behind the cervix spontaneously (Fig. E) and both edges of the tape are tied anteriorly and cut about 2cm in length (Fig.F).



Figures a,b,c,d,e,f: Tucking prolapsed membrane into cervix – Kilani method.

Note:

Because of cultural and religious reasons, direct photography of the female external genitalia is not allowed. The author used, to overcome this problem, an elastic socking filled with gel breast implant to resemble the cervix and bulging membranes**.**

Outpatient follow up:

- Measurement of cervical length
- cervical swab
- repeated CBC
- temperature,
- relative bed rest

(56) RISING RATES OF CAESAREAN DELIVERY AT MANSOURA UNIVERSITY HOSPITAL: A REASON FOR CONCERN.

El Said Abdel-Hady, PhD, MRCOG, Adel Saad Helal, MD, Ehsan Refaie, MD, Osama Warda, MD, Hosam Goda, MD, Lotfy Sherief Sherief, MD.

Department of Obstetrics and Gynecology, Mansoura Faculty of Medicine, Mansoura University, Egypt.

Objectives: To investigate why the rate of caesarean delivery is continuously increasing at Mansoura University Hospital in Egypt?
Methods: This retrospective study collected data on caesarean delivery rates and indications from the medical records of 34598 women admitted to both emergency and high risk obstetric units over a 5-year period (January 2006-December 2010).
Results: The overall rate of caesarean delivery was 47.25%. Rates at the high risk and the emergency units were 79.33% and 29.15% respectively. The annual rate of caesarean delivery increased significantly ($p<0.01$) from 42.65% in 2006 to 55.33 % in 2010, mainly due to an increase in the rate of caesarean at the emergency unit. The most common causes were repeat caesarean (35.78%), medical disorders complicating pregnancy (14.25%), failure to progress in labour (10.37%) and malpresentations (9.9%). Vaginal birth after caesarean (VBAC) was attempted in 2078 women and was successful in 22.23%.
Conclusion: The overall rate of caesarean delivery in Mansoura was 47.25%. This high rate was mainly attributed to previous caesarean delivery, low rate of successful VBAC and the very low rate of attempted instrumental delivery.

Corresponding author: El-Said Abdel-Hady, Department of Obstetrics and Gynaecology, Mansoura University, Egypt.
E-mail: elsaidhady@yahoo.co.uk
Mobile: 01222449336

(57) A NOVEL TOURNIQUET TO REDUCE BLOOD LOSS DURING SURGICAL TREATMENT OF POSTPARTUM HEMORRHAGE IN CESAREAN SECTION.

Abdelaziz A. Tammam[1], Ahmed H. Abdellah[1], Mohamed Y. Abdel-Rahman[2].
Departments of Obstetrics & Gynecology, Faculty of Medicine, South Valley University, Qena[1], and Faculty of Medicine Sohag University[2], Egypt

Objective: To evaluate the efficacy and safety of a novel tourniquet in the management of postpartum hemorrhage (PPH) during cesarean section.
Design: Observational study
Materials and Methods: This study was conducted in a tertiary university hospital between January 2010 and November 2011. Twenty one women with PPH (group 1) underwent a novel intra-cesarean tourniquet were compared to a well selected matched (21 patients) who developed PPH during cesarean section (group 2). A 16or 18 French Foley's catheter was turned around the exteriorized uterus and the infundibuloplevic ligaments at the level of the uterosacral ligaments and tied 3 cm lower to the level of the CS incision. This tourniquet was applied to group 1 before attempting any surgical procedures while stepwise surgical interventions were performed in group 2 according to

the hospital protocol. The outcome measures were the intra- and post-operative blood loss, need for blood transfusion, and maternal morbidities and mortalities. Fisher exact and Mann-Whitney tests were used for statistical analysis when appropriate.

Results: Intra-operative blood loss and the need for blood transfusion were significantly lower in group 1 compared to group 2 (P < 0.01). No significant difference between the two groups regarding pre- and post-operative hemoglobin or hematocrite value. Group 2 showed more frequent pyrexia (19% Vs 14%) and wound gapping (19% Vs 9%), however these differences were not significant (P = 0.50 and 0.33 respectively). No incidence of urinary injury in both groups. Cesarean hysterectomy was indicated in 10 patients; 5 in each group. One case of maternal mortality and another case with lower limb deep venous thrombosis were recorded in group 2.

Conclusion: This technique is an effective and safe intervention for controlling postpartum hemorrhage during cesarean section. It may be offered as a preliminary step to prevent massive bleeding and allow time for blood transfusion and further procedures.

Key words: postpartum hemorrhage, Tourniquet, Cesarean Section (CS).

(58) INTRAVENOUS INFUSION OF PARACETAMOL VERSUS INTRAVENOUS PETHIDINE AS AN INTRAPARTUM ANALGESIC IN THE FIRST STAGE OF LABOR.

Dr. Ahmed Elsayed Hassan Elbohoty, Ain Shams University, Egypt.

Objective: To evaluate the efficacy and adverse effects of an intravenous infusion of 1000 mg of paracetamol as compared with an intravenous injection of 50 mg of pethidine hydrochloride for intrapartum analgesia. Methods: In a randomized prospective study at Ain Shams University, Cairo, Egypt, between April and August 2010, 102 low-risk primiparous women in active labor were allocated to received either paracetamol (n = 52) or pethidine hydrochloride (n = 50). The primary outcome was the efficacy of the drug to supply adequate analgesia as measured by a change in the visual analog scale (VAS) pain intensity score at various times after drug administration. The secondary outcomes included the need for additional rescue analgesia and the presence of adverse maternal or fetal events. Results: As recorded by the VAS score, there was significant pain reduction at 15 minutes, and at 1 and 2 hours in both groups (P b 0.001). The reduction in pain was significantly greater in the pethidine group only at 15 minutes (P = 0.004). None of the women in the paracetamol group had adverse effects, as compared with 64% of the women receiving pethidine. Conclusion: The effectiveness of intravenous paracetamol was comparable to that of intravenous pethidine, but paracetamol had fewer maternal adverse effects.

Keywords: Analgesia Intrapartum Paracetamol Pethidine

FRIDAY, December 14th, 2012:

SESSION (12): (Salle B) (14.30-15.45)

ENDOSCOPY

(59) FERTILITY SAVING LAPAROSCOPIC SURGERY FOR TUBAL PREGNANCY, OPTIONS AND SUCCESS.

Dr. Yousri Afifi, UK

(60) COMPLICATIONS IN LARGE BOWEL RESECTIONS FOR DIE OF THE COLON: « A SERIES OF 100 CASES ».

Prof. VINCENT ANAF
DEPT OF GYNECOLOGY,HOSPITAL ERASME
UNIVERSITE LIBRE DE BRUXELLES, ULB, BRUSSELS BELGIUM

Aim and type of study: retrospective study on complications in a series of 100 large bowel resections for Deep infiltrating endometriosis of the large bowel
Patients: Between October 1997 and September 2008, 97 patients (mean age: 33 years old) underwent large bowel resection for severe digestive endometriosis. A total of 100 large bowel resections were performed. The indication for large bowel surgery was the presence of severe digestive symptoms (cyclical or permanent rectalgia, cramps, rectorrhagia, subocclusion) associated with a high suspicion of large bowel involvement at preoperative setup (double contrast barium enema, MRI and transrectal ultrasonography). In addition all patients presented with severe dysmenorrhea, deep dyspareunia and chronic pelvic pain.
Surgical procedures: In a total of 97 patients, 74 patients (76%) underwent anterior rectal resection, 23 (24%) underwent segmental sigmoid resection, and 3 had ileocaecal resections. 3 Patients underwent 2 resections (sigmoid and ileocaecal).
84 patients (86%) underwent laparoscopically assisted large bowel resection. 13 patients (14%) underwent large bowel resection by laparotomy. Laparotomy was performed in case of previously multioperated patients or in patients where multiple resections were required.
Mean operating time was: 257+/-31 minutes; Mean follow-up was 54 +/- 9 months.
Mean length of the resection specimen was 14+/3 centimeters.
Mean largest diameter of the endometriotic lesion was 3,45+/2,4 centimeters.
All patients had other concomittant endometriotic localizations: peritoneum (100%); ovaries (54%); uterosacral ligament nodules (40%); posterior vaginal nodules (35%); bladder (13%); ureter (3%); Fallopian tubes (8%).
Additional surgical procedures were: peritoneal vaporization (100%), ovarian cystectomy(n=57), uterosacral ligament nodule resection (n=58); posterior vaginal

resection (n=70); partial bladder resection (n=7); hysterectomy (n=6); uretero-ureterostomy (n=6); nephrectomy (n=1); appendectomy (n=6).

Complications:

A total number of 16 patients (16,5%) had complications

Major complications: Anastomotic fistula: (n=2) (2%)
Rectovaginal fistula. (n=2) (2%)
Small bowel occlusion: (n=1) (1%)

Minor complications: anastomotic stenosis. (n=9) (9,3%)
Neurogenic bladder (n=2) (2%)
Peritoneal cyst (n=1) (1%)
Abdominal wall dehiscence (n=1) (1%)

Reinterventions for complications:

A total number of 15 patients (15,5%) underwent reoperation.
9 patients (9, 2%) underwent several interventions.
29 reinterventions were performed in total.

Conclusions: Large bowel resections for DIE of the large bowel are difficult and time consuming operations. The most frequent complication was anastomotic stenosis but patients must be informed of the risk for potentially more severe complications. Complications most of the time require reinterventions and sometimes several surgeries. Rectal resections with low end-to-end mechanical anastomosis were responsible for most of the major complications.

(61) LAPAROSCOPIC MYOMECTOMY FOR LARGE AND MULTIPLE FIBROIDS, TECHNICAL TIPS AND OUTCOME.

Dr. Yousri Afifi, UK

(62) HYSTEROSCOPIC PRACTICES; DID IT MAKE ANY DIFFERENCE?

Prof. Mounir Fawzi El-Hao, Egypt
Professor of OB and GYN, Ain Shams University. Cairo, Egypt

Since the recent revival of hysteroscopy and the advance in hysteroscopic surgery many gynecologists learned the technique, however not all of them have mastered it. Many endoscopists have changed their pactice and altered their managements including their patients consultations, and prognostic decisions.

These aspects are presented and discussed in a comprehensive way about an experience of almost 35 years with hysteroscopy.

(63) THE USE OF "BARBED" SUTURES TO CLOSE THE VAGINAL VAULT AFTER LAPAROSCOPIC TOTAL HYSTERECTOMY".

Dr. Mohamed Faris, Egypt.

Laparoscopic suturing is an important skill in minimally invasive surgery. However, continuous sutures can be quite difficult and time consuming if Vicryl or PDS is used. The invention of the "BARBED" sutures made continuous suturing of the vaginal vault after total laparoscopic hysterectomy faster and easier. It is also associated with good tension and "no" need for knot tying. We shall present our experience with our first ten total laparoscopic hysterectomies performed using this "barbed" sutures to close the vaginal vault. These cases were followed for more than 6 months with no incidence of complications.

(64) THE ROLE OF HYSTEROSCOPIC SURGERY IN SUBFERTILITY

Medhat Hassanaien

Consultant Obstetrician and Gynaecologist, **Clinical lead for minimal Access Surgery**. **James Paget University Hospital-Norfolk**, **Re-elected RCOG Council Member**. UK

The impact of hysteroscopic surgery on cases with sub fertility are enormous and range from assessing the uterine cavity prior treatment, resection of uterine septum or submuocus fibroid to Hysteroscopic sterilisation of cases with Hydrosalpinx prior IVF treatment

In this presentation we will look at what's new in hysteroscopic surgery, alternative treatments, the evidences and results of hysteroscopic surgery and has it made any effect to the fertility outcome

FRIDAY, December 14th, 2012:

SESSION (13): (Salle C) (14.30-15.45)

ONCOLOGY AND FERTILITY

(65) INFERTILITY AND THE RISK OF GYNECOLOGICAL CANCERS.

Prof. Amr El-Shalakany, MSC MD FRCOG.
Ain Shams University, Cairo, Egypt.

For long there have been observations of the protective effect of pregnancy on women from getting breast and other gynecological cancers. One would assume that failure to get pregnant may affect the chances of these cancers occurring to women. Also, can it be that some of the reasons why women would not be able to get pregnant may be linked to the pathogenesis of these cancers?
These valid questions are worthy of looking for answers.

(66) AN UPDATE ON FERTILITY PRESERVATION IN FEMALE CANCER PATIENTS.

Ahmed Badawy, MD FRCOG PhD
Professor of OB/GYN, Mansoura University.

Infertility can arise as a consequence of treatment of oncological conditions. The continued improvement in both the management of oncology and fertility cases in recent years has brought to the vanguard the potential for fertility preservation in patients being treated for cancer. Oncologists must be aware of situations where their treatment will affect fertility in patients who are being treated for cancer and they must also be aware of the pathways available for procedures such as use of GnRH analogues, cryopreservation of gametes and/or embryos, gamete transplantation and more recently the evolving stem cell therapy. Improved cancer care associated with increased cure rates and long term survival, coupled with advances in fertility treatment means that it is now imperative that fertility preservation is considered as part of the care offered to these patients. This can only be approached within a multidisciplinary setting. There are obvious challenges that still remain to be resolved, especially in the area of fertility preservation in prepubertal patients. These include ethical issues, such as valid consent and research in the area of tissue retrieval, cryopreservation, and transplantation.

(67) CYTOGENETICS FOR FERTILITY PRESERVATION.

Hesham Al-Inany, MD. PhD, Egypt.

Many women with systemic lupus erythromatous would require the use of chemotherapeutics like methotrexate and cyclophosphamide. These medications would affect the fertility potential of SLE women. The purpose of this study is to introduce the field of Genomic medicine in order to avoid ovarian toxicity in susceptible women. As there are individual variations in responding to chemotherapeutics, it was decided to examine the genotype of different females having cyclophosphamide treatment. Based on genotyping, prediction and proper counseling of the patients together with applying preventing measures could be applied to preserve ovarian function. The data will be presented in details with clinical module of prevention based on genotype

(68) A CASE OF WELL DIFFERENTIATED THYROID PAPILLARY CARCINOMA ARISING FROM STRUMA OVARII

Magdi Hanafi, M.D.[1], Michael Stargel, M.D.[2]
1, 2 St. Joseph's Hospital in Atlanta, GA – Emory Healthcare System

Struma ovarii is an ovarian teratoma that is comprised predominantly of mature thyroid tissue, and is only seen in 2% of ovarian teratomas. 5-10% of struma ovarii cases are malignant. This 40-year-old female patient presented to her gynecologist, Dr. Hanafi, complaining of left lower quadrant abdominal pain and menorrhagia for one year. The patient had no other symptoms with no major past medical history. An office pelvic transvaginal ultrasound revealed a left ovarian mass with solid and cystic components measuring 52mm x 42mm. Hormonal assay and tumor markers (Ca125 & CEA) were within normal limits. Hysteroscopy, D&C, operative laparoscopy, and left oophorectomy were performed by Dr. Hanafi. The histopathological finding of monodermal mature cystic teratoma (struma ovarii) included a small focus of well differentiated papillary thyroid carcinoma. Postoperative thyroid function tests were within normal limits, and there was no clinical evidence of metastasis in the pelvis or the abdomen. Four years later, the patient has no evidence of recurrence. She has conceived twice since the surgery, the first pregnancy ended as a first trimester miscarriage two years after surgery and she had a full term live birth a year and half later. The patient was followed annually by Dr. Hanafi and received a total body PET scan twice within the first two years after surgery which were both reported to be normal.

Keywords: struma ovarii, papillary thyroid carcinoma, germ cell, teratoma, monodermal

Corresponding Author:
Magdi Hanafi, M.D.

GYN & Fertility Specialists
5673 Peachtree Dunwoody Road, Suite 750
Atlanta, GA 30342
404-851-9300 □ *FAX* 404-851-1358
MHanafi@aol.com

(69) ISFP RECOMMENDATIONS FOR FERTILITY PRESERVATION IN LYMPHOMA, LEUKEMIA AND BREAST CANCER.

Prof. Emad Darwish,
Alexandria University, Egypt.

The practice committee in the International Society for Fertility Preservation developed recommendations for FP in lymphoma, leukemia and breast cancer patients. In men regardless to type of malignancy and risk of testicular failure all cases should be offered cryopreservation of their sperms. As regards women the FP option should be individualized depending on age, marital status, type of malignancy and urgency for the treatment.

(70) ENDOMETRIAL HISTOPATHOLOGY IN SYMPTOMATIC PERIMENOPASUSAL WOMEN WITH CHRONIC LIVER DISEASE AND HEPATIC DYSFUNCTION

Ghali. A, Eman M., Shazly. S

Zagazig University, Egypt.

The study covered a total number of fifty (50) cases. They were divided to two groups; Group A and group B:

1-Group A study: of 35 cases complaining from perimenopausal or post-menopausal bleeding with chronic liver disease and hepatic dysfunction.

2-Group B Study: 15 cases complaining from or bleeding with liver disease and hepatic dysfunction (they were considered as control group).

The liver has definitive threshold capacity of oxidizing estrogen, when this oxidative estrogen when this oxidative function is impaired the blood level estrogen increase this hyper estrogenic state which is persistent and unopposed will ultimately result in hyperplasia of endometrium with or without atypia and even carcinoma, so this group of patients should be screened for early detection of such changes.

(71) STEM CELL THEORY: NEW CONCEPT FOR THE PATHOGENESIS OF ENDOMETRIOSIS.

Mian Mohamed Salama Gad [1] & Mohamed Salama Gad [2]
Genetic Engineering and Biotechnology Institute, Sadat City [1] & Faculty of Medicine [2], Menoufiya University

Adult stem cells are found in an undifferentiated state throughout the whole body. They are able to self-renew through indefinite and/or asymmetric cell division, under the appropriate physiological microenvironment or "stem cell niche" thereby generating committed cells that go on to maintain their organ of origin. They play a critical role in the replenishment and regeneration of dying cells and damaged tissues, thereby contributing to the structural and functional maintenance of the organs and tissues. The human uterine endometrium, which entire mainly consists of glandular epithelium and stroma, exhibits menstruation-associated tissue breakdown and shedding but subsequently displays complete renewal in each monthly menstrual cycle. These dynamic and unique properties support the presence of endometrial stem/progenitor cells that likely reside in the basalis layer and serve as a potential source by which to regenerate the endometrium.

More than 100 years have passed since the first theory explaining endometriosis was proposed by Sampson. To
date, the implantation and metaplasia theories have been widely accepted, and they are not mutually exclusive. Each
theory alone, however, fails to completely explain the pathogenesis of all types of endometriosis. Recent evidence supports the presence of endometrial stem/progenitor cells and their possible involvement in eutopic endometrial regeneration and differentiation. Thus an additional novel mechanism for the origin of endometriotic lesions is that they arise from ectopic endometrial stem/progenitor cells.

Evidence in support of the stem theory is growing; however, no direct evidence for the role of endometrial stem/progenitor cells in the pathogenesis of endometriosis has been reported to date. Although many investigators have identified, isolated, and characterized putative endometrial stem/progenitor cells, no consensus exists regarding which of these distinct populations represents the endometrial stem/progenitor cell fraction. Once an endometrial stem cell is defined, it will be possible for the stem cell theory of endometriosis to progress beyond the level of a simple hypothesis.

Adult stem cells and the human endometrium

FRIDAY, December 14th, 2012:

SESSION (14): (Salle A) (15.45-17:00)

BEST RESEARCH PRIZE PRESENTATIONS

(72) VAGINAL ACIDITY ENHANCEMENT WITH A 3% ACETIC ACID GEL PRIOR TO MISOPROSTOL TREATMENT FOR PREGNANCY TERMINATION IN THE MIDTRIMESTER.

Dr. Ahmed Elsayed Hassan Elbohoty, Egypt.

Objective: To investigate whether enhancing vaginal acidity improves the success of medical abortions in the midtrimester.
Methods: A double-blind, randomized, placebo-controlled trial was conducted with 48 women with missed midtrimester abortions. Twice daily, the study participants (n=24) were treated with a 3% acetic acid gel and the controls (n=24) with a placebo gel, starting 2 days prior to initiating the misoprostol treatment. The primary outcome measures were the rates of successful abortion within 24 and 48 hours. Secondary measures included gel tolerability and adverse effects of the misoprostol treatment.
Results: The success rates were higher in the study group, within both 24 hours (11/23 vs 3/24; P=0.011) and 48 hours (18/23 vs 6/24; P<0.001). Among the women with a vaginal pH of 5 or higher at baseline, acidic gel was also associated with higher success rates within 24 hours (8/13 vs 2/15; P<0.01) and 48 hours (13/13 vs 3/15; P<0,001). The vaginal gels were well tolerated and the misoprostol treatment produced no serious adverse effects.
Conclusion: A 3% acetic acid gel appears to be an effective and safe preparatory adjuvant to vaginal misoprostol treatment for midtrimester medical abortions, especially in women with a vaginal pH of 5 or higher. www.controlledtrials.com: ISRCTN75746444

(73) MIRNA-130A IS A POTENTIAL ENDOMETRIOSIS INDUCING FACTOR

Mourad Selim

Osama Azmy, Wael Elgarf and Mourad Selim
Reproductive Health Research Department, National Research Center, Cairo, Egypt

MicroRNAs (miRNAs) comprise a post-transcriptional layer of gene regulation shown to be involved in diverse physiological processes. We aimed to study whether regulatory networks in the blood of endometriotic women that determine transformation of mesenchymal stem cells into endometrial like cells may involve miRNAs component or not? We examined the expression levels of 88 miRNAs using SYBR Green-based real-time PCR array in blood samples from twelve

women divided into three groups (control group [3 women], mild endometriosis group [4 women] and 5 women included in the severe endometriosis group). The relative abundance of miRNA level was calculated by using the ΔΔCT method.
miRNA-130a was significantly up-regulated in the severe endometriosis group compared to the mild endometriosis and the control groups. Twenty nine miRNAs were significantly down-regulated in the mild endometriosis group while only two were significantly down-regulated in the severe endometriosis group compared to the control group. We conclude that miR-130a is a potent regulators of gene expression in endometriosis leading to enhance transformation of mesenchymal stem cell into endometriotic like cells. Furthermore, the blood levels of miR-130a, may serve as indicators for endometriosis. It also explains the patho-physiology of endometriosis occurrence. This may open up an exciting new avenue for targeted anti-angiogenesis therapy for such a devastating disease.

Key words: *endometriosis, endometriosis inducing factor, miRNA*

Contact details: Dr. Mourad Selim, M.Sc., Reproductive Health Research Department, National Research Centre, 16 Ansar Street from Tahrir street, Dokki, Giza, Egypt
E-mail: selim_morad@yahoo.com. Cell Phone: +2 0122 6426437

(74) CAN ANTIOXIDANTS SUPPLEMENTATION IMPROVE ICSI/IVF OUTCOMES IN INFERTILE WOMEN UNDERGOING IVF/ICSI TREATMENT CYCLES? RANDOMISED CONTROLLED STUDY.

Dr. Mohamed Abdel Fattah Mahmoud Youssef, Egypt.

Background: Good oocyte quality and maturity are important prerequisites for higher fertilization and implantation rates in IVF/ICSI treatment cycles. Reactive oxygen species (ROS) are produced within ovarian follicles, especially during ovulation process, and it is thought that increased ROS activity may be a cause of impaired oocyte maturation and higher rate of failure of IVF/ICSI cycles. It has been approved that antioxidants administration improves sperm numbers morphology. In contrast, the effect of antioxidants had not been evaluated properly yet in women undergoing IVF/ICSI treatment.
Methods: We conducted a randomized controlled trial evaluating the effect of antioxidants supplementation on IVF outcomes at the Egyptian International Fertility IVF –ET center, Cairo, Egypt. 218 women with different indications for IVF/ICSI have been randomized into 2 groups. Study group (n=112) has been supplemented with antioxidant supplementation daily at the start of down regulation treatment and the control group (n=106) did not. The main outcomes were number of mature oocytes, clinical pregnancy rate, fertilization rate, number of embryos transferred & cryopresevred, multiple

pregnancy rate, early miscarriage rate, duration of stimulation and amount of FSH.

Results: There was no significant difference between both group as regards the age, BMI, basal FSH and type of subfertility. There was no significant difference between both groups as regards the number of MII oocytes [12.7 + 9.4 vs 13.2 + 8.6, P= 0.7] and clinical pregnancy rate per woman randomized (38 % vs. 34%; [OR = 1.2; 95% CI 0.70-2.11] .

Conclusion: Oral antioxidants in the form of multivitamins and minerals for a short period of time could not improve oocyte number and pregnancy rates in infertile women undergoing IVF/ICSI treatment cycles.

CLINICAL TRIAL REGISTERATI ON: NTR28/6

KEY WORDS: antioxidants; ovarian stimulation; IVF/ICSI

(75) LETROZOLE STEP-UP PROTOCOL: A SUCCESSFUL NOVEL SUPER-OVULATION PROTOCOL IN INTRAUTERINE INSEMINATION.

Ahmed F. Galal MD, PhD
Lecturer ob & Gyn, Division of reproductive Medicine and infertility, Alexandria University, Egypt

Background & Significance: the successful use of the aromatase inhibitor, letrozole for ovulation induction and ovarian stimulation (OS) was reported when administered as a single one-day dose or multiple daily fixed doses. Letrozole was successful in inducing mono-follicular development in the majority of patients.

Objective: To investigate the success of a novel step-up protocol of letrozole in an attempt to achieve mild multi-follicular development that could be associated with higher pregnancy rates, but still with a reasonable multiple pregnancy rate in a couple with unexplained infertility treated by intrauterine inssimination.

Material and methods .This is a prospective randomized trial that included couples with unexplained infertility treated in our institution over one year from May 2011 up to May 2012Patients were allocated randomly into 2 groups , group A (number 53) received 75 iu of HMG preparation beginning on day 3 of their menstrual cycle and modified according to the response of patients while Patients in group B (number33) received a daily dose of letrozole beginning on day 3 by 2,5 mg (1 tab) increased in step up fashon to 5 mg (2tab) , 7.5 mg(3tab) and finally 10 mg (4tabd) in the next day 4,5 and 6 of the menstrual cycle.

Results: A tendency for a higher clinical pregnancy rate compared to gonadotropins was observed with the letrozole step-up treatment 27.2 % versus 24.5 %. Number of multiple pregnancies was 3 (5.6 %) in gonadotropins groups with no cases in the other group .there was a significant reduction of the cost of IUI cycle. On the other hand non-significant difference noted with the number of mature follicles nor the endometrial thickness.

Conclusion: Letrozole step-up protocol seems to be associated with better clinical pregnancy rates. This could be due to increasing the window of endogenous gonadotropin rise by prolonging the duration of estrogen suppression.

(76) VALUE OF COLOR DOPPLER ULTRASOUND STUDIES ON OVARIAN AND UTERINE VASCULARITY IN PREDICTING INTRACYTOPLASMIC SPERM INJECTION (ICSI) OUTCOME.

Mohammed Atef Behery, Mostafa Hegab*, Ayman Nassar**, Hosam El-Din Kamel*, Eman Ahmed**, Abdalla Khalil***
**** The international Islamic Centre for Population Studies & Research, ART Unit, Al- Azhar University, Cairo, Egypt**
*** Obstetrics and Gynecology department, Faculty of Medicine, Al-Azhar University, Cairo, Egypt.**

Objectives: The study aimed to evaluate the value of color Doppler parameters of the uterine and ovarian arteries in predicting intracytoplasmic sperm injection (ICSI) outcome.

Methods: A total of 80 infertile couples, attending the ART unit-Al Azhar University, Cairo, Egypt, under long protocol ICSI trial were recruited in this prospective study. All patients were ≤ 35 years, BMI ≤ 28 kg/m^2, with no uterine and ovarian pathology and/or anomalies. Doppler U/S done at day 2 and day hCG on uterine and ovarian vascularity to estimate the pulsatility indices (PI). The data were recorded and analysed confidentially and anonymously. The estimated PI at day 2 and day hCG were examined in both pregnancy outcome groups by appropriate statistical tests.

Results: The pregnancy rate was 29% (23 of 80). There have been statistically significant differences between positive and negative pregnancy groups regarding the PI of uterine artery at day hCG ($p < .0001$) and PI of ovarian artery at day 2 ($p = 0.04$) with the highest mean was among patients with negative pregnancy outcome. A positive correlation was detected between PI of ovarian artery at day 2 and MII oocyte number in both positive and negative pregnancy groups with the highest and significant positive correlation was in negative pregnancy group ($r = + 0.28$; $p = 0.03$). In contrast, the correlation was negative for the ovarian PI at hCG day and MII oocyte in positive pregnancy group.

Conclusions: The study findings demonstrate that PI of uterine and ovarian arteries may be useful for predicting the success of ICSI in infertile patients.

Key words: Doppler, ICSI, Oocyte quality, Pulstility index, Pregnancy rate.
Correspondence: Dr. M. Atef
The international Islamic Centre for Population Studies & Research, Azhar ART Unit, Azhar University, Cairo, Egypt
E mail: behery76@hotmail.com

(77) UNILATERAL VERSUS BILATERAL OVARIAN DRILLING IN CLOMIPHENE CITRATE RESISTANT PCOS PATIENTS.

Eman Ahmed, Mohammed Behairy**, Khaled Refat*, Mosaad M Ibrahim****

**** The international Islamic Centre for Population Studies & Research, ART Unit,Al- Azhar University, Cairo, Egypt**
*** Obstetrics and Gynecology department, Faculty of Medicine, Al-Azhar University, Cairo, Egypt.**

Objectives: This prospective study was designed to compare unilateral and bilateral laparoscopic ovarian drilling in cc resistant PCOS patients concerning: ovarian volume, Hormonal changes (FSH, LH, and LH/FSH), Clinical response (ovulation rate and cycle rhythm) after drilling.
Method, 40 infertile women with anovulatory infertility associated with PCOS were prospectively recruited from March 2010 to August 2011. All women were primary infertile less than 5 years duration, with age between 21 to less than 35 years. Exclusion criteria included age <21 and > 35 years, BMI >35kg/m^2, day 3 FSH > 10 IU/ml, associated uterine and ovarian pathology, or day 2 ultrasound shows ovarian cyst and previous ovarian surgery. The cases were divided into two groups 20 cases in each group. Group I : Bilateral LOD. Group II: Unilateral LOD. Basal hormonal profile determination (FSH, LH, FSH/LH ratio and E2) TV/US assessment of ovarian volume and midluteal serum progestrogen were estimated before and after laparoscopy
Results: Patients in both groups were comparable with regard to their age, BMI and duration of infertility. The ovarian volume before drilling was not significantly different between both groups. On the other hand it was highly significant after LOD (P value 0.00001). The reduction in ovarian volume after treatment was (65%) in bilateral and (32%) in unilateral drilling and, again with high significant difference. In both groups there was high reduction in LH level after LOD. The percentage of decrease in LH was insignificant between both groups the reduction was (46%) in bilateral LOD and (44%) in unilateral LOD. The study revealed that the cycles were regular in 16 patients (80%) in bilateral LOD, and 15 patients (75%) in bilateral LOD with no significant difference. Discussing the correlation between age, BMI and duration of infertility, and ovulation rate, the study revealed the longer the infertility duration, the older the woman the lower will be the ovulation success. Cases that failed to ovulates showed lower LH before treatment and higher LH after treatment, also this group had irregular cycles.
Conclusion: Unilateral LOD is similar to bilateral LOD as regard ovulation rate. Unilateral LOD preserve ovarian volume and ovarian reserve and may decrease the possibility of post operative adhesion.

Key words: PCO, laparoscopy, drilling.
Corresponded: Dr. Eman Ahmed IICPSR, Azhar University, Cairo, Egypt
Tel: 01227464730
E mail: emanzayed148@hotmail.com

MERCK SERONO INNOVATIVE AWARD ANNOUNCEMENT CLOSING REMARKS