



***Egon and Ann  
Diczfalusy Foundation  
for  
Supporting Research in  
Reproductive Health***

In collaboration with the Medical Universities of Novi Sad (Serbia) and Szeged (Hungary) University of Szeged; The Reproductive Health-working Group of the Szeged branch of the Hungarian Academy of Science; „Vasile Goldiș” Western University of Arad (Romania); The Serbian Academy of Sciences and Arts - branch in Novi Sad; The Serbian Medical Association - Section of Gynaecology and Obstetrics, Association of Gynaecologist and Obstetricians of Serbia, Montenegro and Republic of Serbia

***10<sup>th</sup> Annual Meeting of the  
Egon and Ann Diczfalusy Foundation***

•

**Programme**

30 November – 2 December 2016

***Dear Colleagues,***

The aim of the “Egon & Ann Diczfalusy Foundation” is to support research in reproductive health and to provide updated knowledge to Obstetricians-Gynaecologists in Central-Eastern Europe.

To foster its aims, every year the Foundation organises an Annual Meeting with a Diczfalusy Award Lecture Symposium (DAL) on Reproductive Health. This year the Diczfalusy Foundation will organise its 10<sup>th</sup> Annual Meeting, the DAL 10 between 30 November and 2 December 2016 in Budapest, Hungary. This meeting will have a special significance as we will celebrate the 10<sup>th</sup> year anniversary of the Foundation established by Professor Egon Diczfalusy.

On behalf of the Scientific Committee and the Presidium of the Foundation, It is our pleasure and privilege to invite you to participate in this event.

We look forward to the pleasure of welcoming you in Budapest!

Yours sincerely,



Prof. Dr. György Bártfai  
president of the Foundation

## *In Memoriam Prof. Dr. Egon Diczfalusy*

The Hungarian and international academic community suffered a great loss when Prof. Dr. Egon Diczfalusy passed away at the age of 96.

He received his MD degree with „Summa cum laude” qualification at the University of Szeged in 1944. He emigrated to Sweden in 1946 and with the recommendation of Prof. Dr. Albert Szent-Györgyi he first went to the Laboratory of the Nobel Prize winner for physics and chemistry Hans von Euler-Chelpin in Karolinska University. He was only 29 years old when in 1949 he was entrusted with the leadership of the Hormone Laboratory of the Clinic.



In 1970 with the Ford Foundation’s help he created the Hormone Research Laboratory at the Karolinska University, which became a famous international scientific training centre for researchers under his leadership. He had achieved significant scientific results: the definition of “**feto-placental unit**” is created by him, which greatly enriched both our theoretical knowledge and clinical practice.

He was one of the founders and creators of the WHO Expanded Programme of Research, Development and Research Training in Human Reproduction Programme. Over 25 years this Programme supported nearly 200 scientific researchers from many countries, who were given a chance to work and become dedicated researcher. I was very lucky to be one of them and could consider him as my mentor and later on as my fatherly good friend.

He has produced several hundred publications, books and lectures and received a number of academic awards. There is a long list of universities, which acknowledged his scientific achievements as a “**Honoris Causa doctorate**”: Among others the Medical University of Szeged, Hungary, University of Timisoara, Western University of Arad, University of Cluj-Napoca, Romania, Edinburgh University, Scotland are on this list. He became a member of the Hungarian Academy of Sciences and the member of the European Academy.

Professor Diczfalusy was a committed humanist and optimist! Under his family’s coat of arms the following words are written: **Empathy, Science, Hope**. He believed in the development of science for humanity and he also did for it.

He has never forgotten his homeland or his Alma Mater; the outstanding collection of his awards can be seen in front of the lecture-hall of our Department. These can be exemplary objects for students

## 10<sup>th</sup> Diczfalusy Meeting

and future generations of clinicians. He also donated his internationally outstanding collection of pre-Columbian sculptures to the University, which now adorn the Dean's Office of the Faculty of Medicine. In 2007, when he was 86 he created the "Egon & Ann Diczfalusy Foundation". The main objective of the Foundation is to strengthen the **collaboration and friendship** between clinicians and researchers in our geographic area and remove the barriers built up in history during centuries. The scientific objective of the Foundation is to improve reproductive health and hold scientific conferences to this effect. The 10<sup>th</sup> anniversary Diczfalusy Scientific Symposium will be held between 30 November - 2 December 2016 in Budapest.

Professor Diczfalusy's life can be mostly characterized by the words of the founder of the Hungarian Academy of Sciences, István Széchenyi: "You live when you live for others."

His friends, disciples and admirers say goodbye to him. May he rest in peace! We will keep fond and respectful memories of him!

Prof. Dr. György Bártfai

President of the "Egon & Ann Diczfalusy Foundation"



## CONGRESS DATE

30 November – 2 December 2016

## CONGRESS VENUE

MTA-Budavári Díszterem  
Hungarian Academy of Sciences – Buda Castle Congress Hall  
H-1014 Budapest, Országház u. 30., Hungary

## SCIENTIFIC COMMITTEE

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### Congress Office

Congress & Hobby Service Ltd.

POB 1022, H-6701 Szeged, Hungary, Phone: +36-62-484-531, Fax: +36-62-450-014

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10<sup>th</sup> ANNUAL MEETING OF THE „EGON AND ANN DICZFALUSY FOUNDATION”

SCIENTIFIC PROGRAM

WEDNESDAY – 30 NOVEMBER 2016

- 1.0. 12:15-14:30 **Workshops on Long Acting Reversible Contraception**  
**Title of the Training Program: Simulation Training for Long Acting Reversible Contraception: Insertion And Removal**  
Program director: Bela Gyarmati  
Program Trainers: David F. Archer, György Bártfai and Sándor Koloszár
- 1.1. 12:15-13:15 **Workshop #1 – Hands on training for insertion and removal for IUS/IUD**  
Chair: *János Annus and Béla Gyarmati*
- 1.1.1. 12:15-12:30 IUD/IUS: Insertion technique - Efficacy and side effects  
*Tibor Novák*
- 1.1.2. 12:30-12:45 Uterine cavities are much smaller than what most gynecologists think  
*Dirk Wildemeersch*
- 1.1.3. 12:45-13:15 Hands on training for insertion and removal: working with a simulator for insertion  
Trainers: György Bártfai, Sándor Koloszár and Tibor Novák
- 1.2. 13:15-13:45 **Keynote lecture 1**  
Chair: *János Annus and György Bártfai*  
The role of the WHO in the training of health workers in the field of Reproductive Health  
*Mario Festin*
- 1.3. 13:45-14:30 **Workshop #2**  
**Implantable capsules**  
Chair: András Szilágyi and Elena Bernard  
1. 13:45-14:00  
Insertion and removal of implantable capsules  
*Sándor Koloszár*

2. 14:00-14:30

Hands on training using simulated arms and placebo capsules

**Trainers: László Kalmár and Sándor Kolozsár**

1.4. **14:30-15:00 Sponsored Symposium 1.**

Chair: *Márta Széll*

Veracity the New Generation NIPT a novel approach for detecting foetal chromosomal abnormalities

*Paris Hatzianastasiadis (NIPD Genetics, Cyprus)*

**15:00 – 15:20 Coffee Break**

1.5. **15:20-17:30 Opening session and Bestowal Ceremony**

1.5.1. **15:20-15:50 Greetings**

**15:50-16:15:** Eulogy on Prof. Egon Diczfalusy

*Giuseppe Benagiano*

**16:15-17:30: Bestowal Ceremony**

Chair: Gyula Telegdy, György Bártfai, Tihomir Vejnovic, Henry Gabelnick

**Lifetime Scientific Award**

Laudation of Giuseppe Benagiano by Gyula Telegdy

Hand over the Prize by Gyula Telegdy

**Special tenth anniversary award for supporting the Foundation**

Laudation by György Bártfai

Acceptance speech by Erik Bogisch

Hand over the Prize by György Bártfai

**Young Scientist Award**

Laudation by Gyula Richárd Nagy

Acceptance speech by Nicolae Bacalbasa

Hand over the medal by Henry Gabelnick

1.6. **17:30-18:00** Chair: *David F. Archer*

Menopause Hormone Therapy: Benefits including Quality of Life versus Cardiovascular and Oncologic Risk – an audit

*Santiago Palacios*



## 1.7. 18:00-19:15 Round Table Discussion About Malpractice

Chair: *Nándor Ács, Eric Cosmi and Tihomir Vejnovic*

<i>Speaker</i>	<i>Title</i>	<i>Time</i>
Dieter Bettelheim	Medical Malpractice – State of Art	25
Peter Koliba	Malpractice in gynecological endoscopy	20
Paja Momčilov	Ethical aspects in Obstetrics and Gynecology – How can we decrease the malpractice cases?	20
Discussion		10

This session is followed by the Finger food reception and opening of the exhibition and poster viewing.

## 1.8. 20:15

Organ concert in the St. Matthias Church

*Concert ticket is required for participation.*

(The Church is about 5 minutes walking distance from the congress venue.)

See map below.



## THURSDAY – 1 DECEMBER 2016

### 2.0. 8:30-10:45 Session #1 Prematurity

Chair: *Luis Cabero Roura, János Rigó and Britt-Marie Landgren*

<i>Speaker</i>	<i>Title</i>	<i>Time</i>
Luis Cabero Roura	Analysis of the problem of premature birth. An epidemiologic view. / Evidence in preventing prematurity.	20
Giuseppe Benagiano	Prematurity: a Global overview	20
Nicolae Suci	Prematurity markers and cervical length.	15
János Rigó	Chorioamnionitis: problems in diagnosis, microbiology and treatment.	15
Tihomir Vejnovic	Placenta previa, accreta and perprata - challenge for obstetricians	15
Miklós Szabó	Development of Non-invasive Treatment Modalities in the Care of Neonatals	15
Ana Mitrovic Jovanovic	Tocolysis – tocolytics in General and Magnesium in Particular	15
Discussion		20

**10:45-11:10** Coffee Break

### 2.1. 11:10-13:10 Session #2 Contraception

Chair: *József Bódis, Gábor Németh and Dana Stoian*

<i>Speaker</i>	<i>Title</i>	<i>Time</i>
David Archer	Microchip Controlled Contraception and Green Contraception	20
Mario Festin	A prospective, open-label, single arm, multicentre study to evaluate efficacy, safety and acceptability of pericoital oral contraception using LNG 1.5 mg	20
Nándor Ács	Treatment Modality: Extended-cycle-length of Oral Hormonal Contraceptives	20
George Creatsas	Contraception for adolescence – challenge for the gynaecologist	20
Ilpo Huhtaniemi	Male Contraception	20
Discussion		20

- 2.2. **13:10-14:00** **Sponsored Symposium 2**  
**Lunch Symposium and Lunch Break**  
 Chair: *György Bártfai*  
 New strategies for the management of uterine fibroids  
*Jacques Donnez*

- 2.3. **14:00-16:20** **Session #3 Infertility and habitual abortion**  
 Chair: *Wilfred Feichtinger, Ana Mitrovic Jovanovic*

<i>Speaker</i>	<i>Title</i>	<i>Time</i>
Wilfred Feichtinger	Non-invasive preimplantation genetic screening (PGS)	20
Péter Kovács	The role of time-lapse embryo monitoring in embryo selection during in vitro fertilization	20
József Bódis	Platelet Associated Regulatory System (PARS)	20
Gábor Németh	Endoscopic Diagnosis of Infertility	20
Peter Chitulea	The dark side of infertility	20
Győző Petrányi	Immunologic background of recurrent spontaneous abortion: diagnosis and therapy	20
Discussion		20

**16:20-16:45** Coffee Break

- 2.5. **16:45-18:45** **Session #4 Menopause**  
 Chair: *Peter Chitulea, Peter Koliba and Dimitrios Lazaris*

<i>Speaker</i>	<i>Title</i>	<i>Time</i>
Juha Tapanainen	Metabolic Outcomes in PCOS	20
David Serfaty	Obesity and contraception	20
David F. Archer	Atrophic Vagina Assessment and Treatment	20
Santiago Palacios	Osteoporosis Diagnosis and Treatment	20
Hanna Salvolainen-Peltonem	Impact of Age and Hormone Therapy on Cardiovascular Risk	20
Discussion		20

# 10<sup>th</sup> Diczfalusy Meeting

20:30

## Conference dinner

*Conference dinner ticket is free of charge for VIP participation. For other participants dinner ticket is available for a certain amount. See more information about in the program booklet/Social program.*



## FRIDAY – 2 DECEMBER 2016

3.0. 8:15-10:15 **Session #5 Ovarian Cancer**Chair: *Marius Craina, Katerina Jeremica and Róbert Póka*

<i>Speaker</i>	<i>Title</i>	<i>Time</i>
Sinan Özalp	The pathogenesis of epithelial ovarian cancer	20
Róbert Póka	Screening and new molecular marker model in ovarian cancer	20
Dimitrios Lazaris	Front line therapy for advanced ovarian cancer	20
Marius Craina	Imagistic methods used for diagnosis of ovarian cancer and endometriosis	20
Aleksandar Stefanovic	Salpingectomy for ovarian cancer prevention. Fertility sparing surgery in cancer.	20
Discussion		20

10:15-10:30 Coffee Break

3.1. 10:30-12:30 **Session #6 Young Diczfalusy Fellows**Chair: *Cristian Furau, Gyula Richárd Nagy and Aleksandra Vejnovic*

<i>Speaker</i>	<i>Title</i>	<i>Time*</i>
Cristian Furau and Aleksandra Vejnovic	Report of activity of the Young Diczfalusy Fellows	20
Aleksandra Vejnovic	The incidence of endometriosis in women who had neonatal uterine bleeding – cohort study	10
Cristian Furau	Medical students knowledge and attitudes about contraceptive methods in Arad University	10
Gyula Richárd Nagy	Longer oral contraceptive use might lower the risk for Down syndrome	10
Peter Koliba Jr.	Complications of laparoscopy	10
Rares Gherai	Surgical Management of Obstetrical and Gynecological Hemorrhages	10



# 10<sup>th</sup> Diczfalusy Meeting

George Toth, Craina Marius and Doru Anastasiu	Sexual education for obstetricians and gynecologists	10
András Molnár	Examinations of placental 3-dimensional power Doppler indices and perinatal outcome in pregnancies complicated by intrauterine growth restriction.	10
Marko Novakovic	The effect of combined oral contraceptives on the hemostatic system	10
Discussion		20

## 3.2. 12:30-13:15 Session #7

**Poster Session** - The awarded posters will be presented

Chair: *Henry Gabelnick and Zuzana Niznaska*

Poster Committee:

Chair: *Henry Gabelnick*

Members: *Gheorghe Furau, Cringu Ionescu, Katerina Jeremica and Péter Kovács*

## 3.3. 13:15-13:30 Closing Remarks and Conclusions

Chair: *György Bártfai and Giuseppe Benagiano*

## 3.4. 13:45-16:00 Board Meeting – Working Lunch for Board members



## GENERAL INFORMATION

### REGISTRATION OPENING HOURS AT THE VENUE

30 November 10:00–19:30

1 December 07:30–19:00

2 December 07:15–14:00

Phone (only available on 30 November-2 December, 2016): +36-30/977-4007

### ON-SITE REGISTRATION FEES FOR INTERNATIONAL PARTICIPANTS

- |  |                     |
|--|---------------------|
| 1. Participants                          | 60,- €              |
| 2. Young participants*                   | 40,- €              |
| 3. Young participant (Poster presenter)* | no registration fee |
| 4. Board of trustees, invited speakers   | no registration fee |

\*(not older than 35 years)

### ON-SITE REGISTRATION FEES FOR HUNGARIAN PARTICIPANTS

- |   |                     |
|---|---------------------|
| 1. Participants                           | 20.000 Ft           |
| 2. Young participants*                    | 12.000 Ft           |
| 3. Young participants (Poster presenter)* | no registration fee |
| 4. Board of trustees, invited speakers    | no registration fee |
| 5. Day ticket                             | 10.000 Ft           |
| 6. Day ticket for young participants      | 8.000 Ft            |

\*(not older than 35 years)

*Day ticket includes: scientific program and coffee breaks of the day and the program book.*

### **The registration fee for participant covers the following:**

- Admission to all scientific sessions
- Program Book
- Coffee Breaks
- Brown-bag-lunch break only 1 December (sponsored)
- Finger food reception (30 November)
- Organ concert in the St. Matthias Church (30 November)

*The day ticket includes: scientific program and coffee breaks of that day and the Program Book.*

*Food and drink costs (30 EUR or 10.000 Ft) will be listed separately on the invoice, except of the day tickets.*

*Hereby we inform you, that lunch is provided only 1 December.*

## **SOCIAL PROGRAMS**

- Organ concert in the St. Matthias Church (1014 Budapest, 2. Szentháromság Square)

*30 November, 20:15*

*(A ticket for the concert is requested for participation. Price for accompanying person: 3000 HUF/10€)*

- Conference dinner (Hungarian Academy of Sciences – Buda Castle Congress Hall, 1014 Budapest, Országház St. 30.)

*1 December, 20:30*

*Price: 40 EUR/12.000 Ft*

## **CONGRESS LANGUAGE**

The official language of the Congress is English.

## **NAME BADGES**

Participants are requested to wear their name badges at all times. Invited speakers and VIP participants of the congress will be distinguished by light blue coloured badges.

## **INFORMATION FOR CHAIRS AND SPEAKERS**

Depending on the length of sessions, the speakers have 15-20-25 minutes to share their results (Presentations are followed by 20 minutes discussion/questions at the end of each session). All presenters are kindly requested to check and hand in their presentation - in case they haven't sent it to the Organizers before the Congress - at the Technicians' desks at least 1 hour prior to the lecture sessions. Chairs of the sessions are kindly asked to introduce the invited speakers to the audience at the beginning of each sessions and also to devote attention not to exceed the time frame of the sessions. Chairs are asked to initiate discussion/debate at the end of the sessions.

## **POSTER INFORMATION**

Posters will be on display in paper format during the Congress. The posters will be supervised by a Poster Committee. The best three posters of the Congress will be awarded by the Committee. In addition, some posters will be awarded by the audience. During the poster session on 2 December the awarded posters will get the chance to be presented. Poster presenters are kindly asked to prepare a few Power Point slides, by which they can present the topic of their poster briefly, in case of having their poster awarded.



## **CERTIFICATE OF ATTENDANCE**

A certificate of attendance will be available for all registered participants at the registration desk.

## **PARKING**

Buda Castle is very busy, there are only a few parking lots around the area. If you wish to enter Buda Castle by car, you have to fill an official form in order to get the permission for entering.

You can find the form at the website below:

[http://www.bkk.hu/teherforgalom/wp-content/uploads/2012/02/lgenylolap\\_HU\\_2012\\_BKK.pdf](http://www.bkk.hu/teherforgalom/wp-content/uploads/2012/02/lgenylolap_HU_2012_BKK.pdf)

## **TAXI**

We recommend the participants three taxi-companies in Budapest:

Fő Taxi: +36/1-222-2222

City Taxi: +36/1-111-1111

Taxi 2000: +36/1-2000-000

## **PUBLIC TRANSPORTATION**

If you want use public transportation, we can offer you to visit the following websites:

<http://www.bkv.hu/en/>

## **ACCOMMODATION**

Participants are requested to book their accommodation directly at the hotels. Costs shall be covered by participants.

There are plenty of hotels nearby, at the Buda Castle district and you can find hotels at the Buda or Pest side as well.

## **INSURANCE/LIABILITY**

The Organizers of the Congress do not accept any liability for damages and/or losses of any kind which may be occurred by congress participants or accompanying persons. Delegates participate at all events at their own risk.

## **MODIFICATION OF CONGRESS PARTICIPATION**

In the case of cancellation or modification of any of the datas of your invoice, it will mean a handling charge of 15 EUR.

Please notify the congress office of your modification in writing.

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## YOUNG SCIENTIST PRIZE

The Prize is given annually to an internationally acknowledged young investigator, for his/her achievements in improving Reproductive Health.

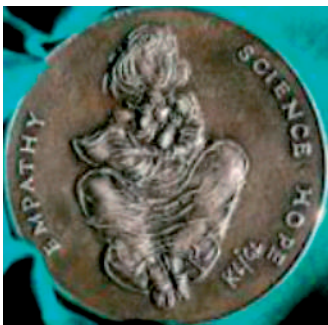
One side depicts a mother with her child and Professor Diczfalussy's Life-Motto: **Empathy, Science and Hope**

The other side shows the Dom square with the Votive Church and the Microbiological Institute of the University, Szeged and a frequently quoted phrase from him: **Medicina, Anchora, Salutis**.

**The previous years' awarded were:**

***For The Young Scientist Award***

- 2007 Dr. Nathalia Maria Cruz (Sweden)
- 2008 Dr. Eszter Ducza (Hungary)
- 2009 Dr. Claudio Avram (Romania)
- 2010 Signe Altmae, Ph.D. (Sweden)
- 2011 Dr. Cristian Furau (Romania)
- 2011 Dr. Dunja Lonchar (Serbia)
- 2012 Dr. Attila Molvarec (Hungary)
- 2013 Dr. Silvia Visentin (Italy)
- 2014 Dr. Salvatore Gizzo (Italy)
- 2015 Dr. Gyula Richárd Nagy (HU)

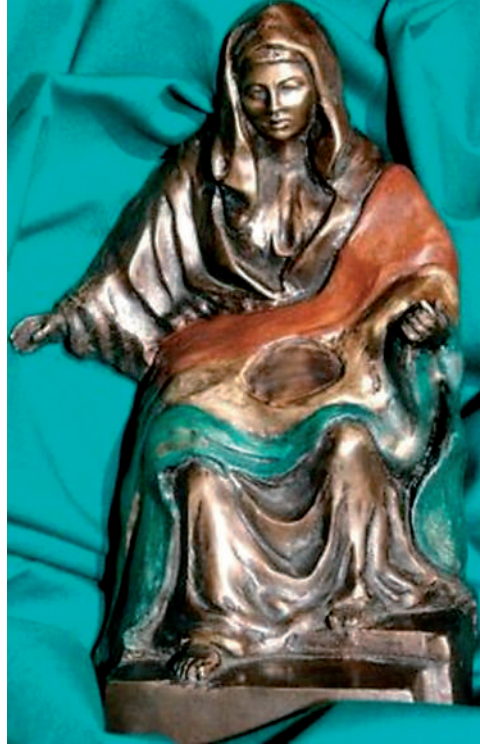


## THE DICZFALUSY PRIZE

The prize acknowledges one's lifetime scientific achievements in the field of research on Reproductive Health with a miniature version of the original statue of Klara Tobias, called the „Hungarian Pieta 1956”.

### ***For The Lifetime Scientific Achievement Award***

- 2007 Prof. Salvatore Mancuso (Italy)
- 2008 Prof. Britt-Marie Landgren (Sweden)
- 2009 Prof. Mahmud Fathalla (Egypt)
- 2010 Prof. David Archer (USA)
- 2011 Prof. Biran Affandi (Indonesia)
- 2012 Prof. Badri Saxena (India)
- 2013 Prof. Mark Bygdeman (Sweden)
- 2014 Prof. Ilpo Huhtaniemi (Finland)
- 2015 Prof. Gyula Telegdy (HU)



**10<sup>th</sup> Annual Meeting of the  
Egon and Ann Diczfalusy Foundation**

*Abstracts*



## 1. 7. ROUND TABLE DISCUSSION ABOUT MALPRACTICE

### **MEDICAL MALPRACTICE IN OBSTETRICS AND GYNECOLOGY – STATE OF THE ART**

Dieter Bettelheim

*Department of Obstetrics and feto-maternal Medicine, Medical University of Vienna  
Vienna (Austria)*

A growing number of lawsuits handled by lawyers, specialised for personal injury deals with errors by clinicians in the field of obstetrics and gynaecology. This is also the reason for the fact that Obstetricians and Gynaecologist have to pay extremely high rates for their medical malpractice liability insurance. In this presentation I will give examples for lawsuits through our entire field of Obstetrics and Gynaecology and I will try to give some tools to the doctors and other healthcare professionals in the audience to prevent losing a lawsuit.

Medical doctors cannot prevent being accused of being negligent or having caused physical damage or psychological trauma to their patients but if they take care of the most important rules- which will be shown in this presentation- they have good armaments to protect themselves against unjustified assaults.

Nowadays evidence based medicine is common practice. This implies that clinicians follow guidelines throughout diagnosis and treatment of patients. If clinical management is well documented and doctors can proof that they have informed their patients about implications and risk of their treatment, lawyers will not easily be able to proof that a doctor has made a preventable mistake in case of a complication.

### **MALPRACTICE IN GYNECOLOGICAL ENDOSCOPY**

Peter Koliba

*Dept. od Gynecology and Obstetrics, Gynartis, s.r.o.– the private medical facility  
(Ostrava, Czech Republic)*

#### Introduction

Medical malpractice accidents can have very serious implications for the lives of victims. Most medical malpractice lawsuits that involve gynecologic endoscopy and laparoscopy result from either: 1. improper prevention, 2. inadequate recognition or 3. delayed intervention. A basic understanding of

anatomy, physiology, and diagnostics remains essential to high-quality patient care and risk reduction. Each case is individual and we must always distinguish whether it was a carelessness, negligence or unpredictable complication.

## Objectives

The author presents an overview of the issue of malpractice in the available literature. The potential for litigation related to this problem (especially for the laparoscopic technique) is a very real concern to the surgeon, patient and insurance carriers. As with all medical negligence claims associated with complications (surgical or otherwise) the issue is are these complications examples of self-evident negligence?

Laparoscopic gynecologic surgery is associated with a low frequency of complications but is a procedure that is not without risk. Greater technical difficulty and prior surgery were factors associated with a higher frequency of complications. Complications of laparoscopy in gynecology occur in approximately 0.14–3.5 %.

## Conclusion

Whatever the experience of others and the number of papers published, every surgeon has their own learning curve that depends on how interested they are in the technique, their manual ability and their technological environment. They should be willing to learn the technique and simply have to accept the stress and the time involved with the development of the endoscopic revolution in their own department.

## **ETHICAL ASPECTS IN OBSTETRICS AND GYNECOLOGY – HOW CAN WE DECREASE THE MALPRACTICE CASES?**

*Paja Momcilov*

We have not received the abstract until the deadline.

## **2.1. SESSION #1 PREMATURITY**

### **PREMATURITY: PREVENTION AND TREATMENT**

*Luis Cabero Roura*

*Autonomous University of Barcelona, Hospital Materno-infantil Valle Hebron*

*(Barcelona, Spain)*

Preterm birth is defined as delivery at < 37 completed weeks of pregnancy (World Health Organization). Spontaneous preterm birth (SPB) includes preterm labor, preterm spontaneous rupture of membranes, preterm premature rupture of membranes (PPROM) and cervical weakness; it does not include indicated preterm delivery for maternal or fetal conditions. SPB is also the leading cause of long-term morbidity, including neurodevelopmental handicap, cerebral palsy, seizure disorders, blindness, deafness and non-neurological disorders, such as bronchopulmonary dysplasia and retinopathy of prematurity. Delaying delivery may reduce the rate of long-term morbidity by facilitating the maturation of developing organs and systems. The benefits of administration of antepartum glucocorticosteroids to reduce the incidence and severity of respiratory distress syndrome may be exploited by delay. Delay may also permit transfer of the fetus *in utero* to a center with neonatal intensive care unit facilities. There is considerable variation in the way that spontaneous preterm labor is diagnosed, managed and treated internationally. An estimated 15 million babies are born too soon every year. That is more than one in 10 babies. Around one million children die each year due to complications of preterm birth. Many survivors face a lifetime of disability, including learning disabilities and visual and hearing problems.

In almost all countries with reliable data, preterm birth rates are increasing. Globally, prematurity is the leading cause of newborn deaths (babies in the first four weeks of life) and now the second leading cause of death after pneumonia in children under the age of five. Inequalities in survival rates around the world are stark. In low-income settings, half of the babies born at 32 weeks (two months early) die due to a lack of feasible, cost-effective care, such as warmth, breastfeeding support, and basic care for infections and breathing difficulties. In high-income countries, almost all of these babies survive.

More than three-quarters of premature babies can be saved with feasible, cost-effective care – e.g. antenatal steroid injections (given to pregnant women at risk of preterm labour to strengthen the babies' lungs), kangaroo mother care (the baby is carried by the mother with skin-to-skin contact and frequent breastfeeding), antiseptic cream for the umbilical cord, and antibiotics to treat newborn infections – even without the availability of neonatal intensive care. Over the past decade, some countries have halved deaths due to preterm birth by ensuring that health workers are skilled in the care of premature babies and by improving supplies of life-saving commodities and equipment. These include Ecuador, Oman, Sri Lanka and Turkey.



From the theoretical point of view, there are three preventive levels: Primary prevention (every single action tending to diminish or to disappear the different verified risk factors causing prematurity). The secondary one (those strategies directed to the very precocious detection of the anomaly marker in order to be able to act in a very initial and accurate way, assuming with it an improvement on the possibilities of therapeutic success). And finally, the tertiary one (To diminish the negative impact of the process on individuals, by means of therapeutic interventions not only maternal but even on neonate).

Primarily, the more widely accepted risk factors are ethnicity (particularly black race), lack of a stable couple, low social-economic level, recurrent miscarriage, antecedent of assisted reproductive techniques, multiple gestation, misplacentation, presence of bleeding during gestation, uterine and cervical anomalies (including those associated with *in utero* exposition to Diethylstilbestrol), smoking; and above all, the antecedent of a previous preterm and/or low weight born baby. Other possible risk factors are urogenital tract infections, cocaine abuse, inadequate or absent prenatal care and the season (Value of this one varies according to the region of the world).

As risk factors, weakly associated with prematurity, or just evident on certain population subgroups, it is possible to find: maternal age, newborn's gender, parity, low inter-gestational interval, sexual activity, psychosocial stress, low maternal height, pre-gestational overweight, anemia and job related stress. Most of them are not completely confirmed and further research is needed to accept them as actual risk factors. Despite such a long list of related epidemiologic issues involved in PB, only 25-30% of cases in developed countries have a proved risk factor, and even in such places, ethnic and social situation are notoriously relevant, thus black women have an increased risk of Premature Rupture of Membranes while white, high standing women trends more to have idiopathic PB. (4) That's why causal analysis has to be customized for every single case.

Besides its higher frequency, idiopathic PB seems to be the one that better can be influenced by programs of primary prevention. Nevertheless, the lesser the prematurity rate is, the greater percentage is due to spontaneous PB. As a matter of fact, for every 1% of total incidence reduction, there is a 3% more of spontaneous PB as contributor for total prevalence.

Clinicians always wonder how able are they to reduce or even overcome one or more causal factors, and the answer is that majority of them are impossible, or at least, extremely difficult to be controlled

(ethnic, biologic or social conditions as well). That is why primary prevention has very little success, no matter what is done, in preventing prematurity.

About secondary prevention, the use of some specific parameters (markers) such as fetal fibronectin, mother's ILGF-2, cervix length, subjective cervical modifications, etc. allows identifying patients on higher risk of PB, giving therefore clinicians the possibility of attempting an early preventive treatment. In this particular group of patients there are three specific therapeutic interventions: Pessary, Cerclage and prophylactic progesterone treatment. We will discuss these options.

### **PREMATURITY: A GLOBAL OVERVIEW**

Giuseppe Benagiano

*Obstetrics, Gynaecology and Urology, „Sapienza”, University of Rome  
(Rome, Italy)*

It is estimated that some 15 million babies are born premature; among them, 5 million in Africa and 8 million in Asia.

Preterm birth is defined as babies born alive before 37 weeks of pregnancy are completed. There are sub-categories of preterm birth, based on gestational age: extremely preterm (<28 weeks); very preterm (28 to <32 weeks); moderate to late preterm (32 to <37 weeks).

Rate of prematurity can be as high as 18% as in Malawi, or as low as 5.3% as in Latvia. In 2012, in the most populous countries (China and India) there were, respectively, 1.172.300 and 3.519.100 prematures.

A 2013 meta-analysis of 45 studies indicated that black ethnicity was associated with an increased risk of preterm delivery compared with whites.

Currently, some 1.3 million babies worldwide die during childbirth. Although most of these deaths are preventable, science alone cannot save those lives without proper infrastructures.

According to the Global Health Observatory of WHO, in 2015 some 45% of all children who died before reaching their 5<sup>th</sup> year of life did so during the first month after birth. Among them, a substantial number was made-up by prematures.

Preterm birth complications are the leading cause of death among children under 5 years of age, responsible for nearly 1 million deaths in 2013. According to WHO, they represent 16% of the total.

Three-quarters of them could be saved with current, cost-effective interventions.

To increase awareness and raise funds for prematurity, the 17<sup>th</sup> of November has been designated as "PREMATURITY DAY".

## **THE OXIDATIVE STRESS-INDUCED PATHOGENESIS IN SPONTANEOUS PRETERM BIRTH**

*Nicolae Suci*

*Obstetrics and Gynecology, University of Medicine and Pharmacy „Carol Davila”  
(Bucharest, Romania)*

Normal term (NTB) and spontaneous preterm birth (PTB) are documented to be associated with oxidative stress (OS) and imbalances in the redox system (balances between pro- and anti-oxidant) have been reported in the maternal-fetal intrauterine compartments. The physiologic (at term) and pathophysiologic (preterm) pathways of labor are not mediated by OS alone but also by OS-induced damage to intrauterine tissues, especially premature rupture of the fetal membranes (pPROM). Considering that this pPROM could be the main cause of PTB, a prominent role will be represented by the OS marker studies.

In conclusion these assays previous treated might allow to select sub-groups in which antioxidant supplementation could reverse the OS damages. In relation to role played by the tetrahydrobiopterin (BH<sub>4</sub>) as antioxidant with ·OH scavenger power 150 times higher than vitamin C, BH<sub>4</sub> tablets (Schircks Laboratories) or Sapropterin (Kuvan, Serono Merck), used in the treatment of hyperphenylalaninaemia (HPA) due to BH<sub>4</sub> deficiency, could reverse OS damages and reduce the risk of adverse pregnancy outcomes as PTB if orally administered during pregnancy

## **CHORIOAMNIONITIS: PROBLEMS IN DIAGNOSIS, MICROBIOLOGY AND TREATMENT**

*János Rigó*

*Semmelweis University  
(Budapest, Hungary)*

We have not received the abstract until the deadline.

## **PLACENTA PRAEVIA AND PERCRETA - CHALLENGE FOR OBSTETRICIANS**

*Tihomir Vejnovic*

*Faculty of Medicine, University of Novi Sad*

*(Novi Sad, Serbia)*

Introduction: caesarean section is one of the most common surgical operations performed in women. Becoming safer procedure, rate of cesarean section exponentially increased, revealing new health problems such as abnormal placental attachment and changing trends of perinatal pathology.

Objective: to present recommendations for surgical care of patients with placenta percreta and share new hypothesis of operative technique influence on placental complication.

Material & Methods: literature review.

Results: incidence of hysterectomies after caesarean section increased 100%. (0,8/1000-1,5/1000) in last 15 years. Main indication for peripartum hysterectomy changed from uterus atony to placental complication. The same trend was seen at Clinic of Obstetrics&Gynaecology in Novi Sad, where the incidence of peripartum hysterectomies in 2007 was 4 and in 2015 reached 11/2000 operations. Reported incidence of placenta increta/percreta is 1/533 deliveries. The recommended management of suspected placenta percreta is planned preterm cesarean hysterectomy with the placenta left in situ because removal of the placenta is associated with significant hemorrhagic morbidity. Average blood loss when placenta is removed was 6750 ml and when left in situ 2062.5 ml. There were no cases of placenta increta/percreta among the patients delivered only using Vejnović modified technique in previous pregnancies (overall.number-15000 patients).

Conclusion: uterus closure is the most important step of caesarean section that can influence the occurrence of placental complications. The main goal is to make smaller scar on uterus and to preserve uterine wall thickness and the structure. When placenta percreta is suspected, individualized approach should be used in planning cesarean hysterectomy with placenta left in situ.

Keywords: placenta percreta, operative technique.

## **DEVELOPMENT OF NON-INVASIVE TREATMENT MODALITIES IN THE CARE OF NEONATALS**

Szabó Miklós

*Ist Department of Pediatrics, Semmelweis University Budapest*

*(Budapest, Hungary)*

Neonatal medicine save millions of infant lives annually, however over-medicalisation and overtreatment is typical. Some key elements of the neonatal physiology and biological optimums were studied and discovered only recently.

Observations after birth showed that transcutaneous oxygen saturations even below 85 % before 10 minutes of age are physiological. We learned that immediate restauration of oxygenation during delivery room resuscitation using 100 % oxygen is rather toxic than beneficial. Therefor the current recommendation is the use of 30 % FiO<sub>2</sub> at delivery room stabilisation.

Late (60 sec) cord clamping is more physiologic and associated with lower risk of intraventricular bleeding and better neurologic outcome in the very preterm infant.

Earlier practice of conventional mechanical ventilation was associated with increased risk of bronchopulmonary dysplasia, what was replaced by non-invasive modes of ventilation like nasal CPAP or high flow nasal cannula. This types of respiratory support allow the spontaneous breathing of the infants and reduce the risk of mechanical injury of the immature lungs.

Early introduction of own mother milk ie. colostrum and rapid increase of enteral feds to full enteral feeding is one of the key intervention to reduce the risk of necrotizing enterocolitis, retinopathy of prematurity and late onset sepsis, moreover it is associated with better cognitive performance.

The intensive care environment has changed significantly. Stressful stimuli, like painful procedures, noise, light were reduced, and active pain management, positive stimuli, like skin to skin contact with parents were introduced, all this measures add to better neurological outcome.

## **TOCOLYSIS – TOCOLYTICS IN GENERAL AND MAGNESIUM IN PARTICULAR**

*Ana Mitrovic Jovanovic*

*Daily hospital, University Clinic for Gy and OB Narodni front Belgrade*

*(Belgrade, Serbia)*

Tocolytic agents have limited efficacy. There are limited data available comparing different dosing regimens of as tocolytic therapy for the prevention of preterm birth. Clinicians can choose from a variety of drugs to achieve the primary goal of delaying delivery by 48h, allowing time for administration of corticosteroids for fetal lung maturity and allow time for intra-uterine transfer to a hospital with neonatal intensive care facilities. Tocolytic agents should be used between 24(+0) and 34(+6) weeks of amenorrhea. Progesterone is currently the most promising agent for maintenance tocolysis. Progesterone was first studied as a tocolytic agent in the 1960s. Studies are conflicting, the meta-analyses on progesterone show some promise in different outcomes of delayed delivery. Cyclo-oxygenase inhibitors and calcium canal inhibitors seem to be the most efficient. Betamimetics are tocolytic agents with the highest incidence of severe maternal side effects. Oxytocin receptors antagonists - ORAs and cyclo-oxygenase inhibitors are tocolytic agents with the best maternal tolerating profile. Deficiency of intracellular magnesium level increase calcium level and uterus contraction. Oral supplementation of the magnesium during pregnancy possibly could prevent preterm contraction due to the magnesium deficit in the cell. Magnesium sulphate has been used to inhibit preterm labour to prevent preterm birth. There is no consensus as to the safety profile of different treatment regimens with respect to dose, duration, route and timing of administration. Complex physiology of preterm labor will allow us to uniquely target different etiologies that lead to the final path resulting in spontaneous preterm delivery.

## 2.2. SESSION #2 CONTRACEPTION

### MICROCHIP CONTROLLED CONTRACEPTION AND GREEN CONTRACEPTION

David Archer

*Clinical Research Center, Eastern Virginia Medical School | Department of Obstetrics & Gynecology  
(Norfolk, England)*

We have not received the abstract until the deadline.

### A PROSPECTIVE, OPEN-LABEL, SINGLE ARM, MULTICENTRE STUDY TO EVALUATE EFFICACY, SAFETY AND ACCEPTABILITY OF PERICOITAL ORAL CONTRACEPTION USING LNG 1.5 MG

Mario Philip Festin

We have not received the abstract until the deadline.

### TREATMENT MODALITY: EXTENDED-CYCLE-LENGTH OF ORAL HORMONAL CONTRACEPTIVES

Nándor Ács

*Semmelweis University  
(Budapest, Hungary)*

We have not received the abstract until the deadline.

### MALE CONTRACEPTION

Ilpo Huhtaniemi

*Surgery & Cancer, Imperial College London  
(London, United Kingdom)*

Several effective contraceptive methods are available for women to prevent unintended pregnancy. However, some women are not able use them because of health conditions or side-effects, in which case the couples are left without effective contraceptive options. Apart from condoms and vasectomy, no modern contraceptives are still available for men. This is a real missed opportunity because of medical, but also for gender equality reasons. There is lots of scientific information that men would like to take

a more active role in family planning than possible today, if novel male methods were available. There is an additional need for novel contraceptives to prevent the large number of 80-90 million unintended pregnancies that occur world-wide annually. Numerous approaches, including hormonal methods and various types of vas occlusion, have been tested clinically, and multiple experimental models, often based on inactivation of testis- or epididymis-specific gene products regulating spermatogenesis or sperm maturation, are being tested. A rapid breakthrough in the field is not in sight for multiple reasons, including the difficulty to interfere with sperm biology, lack of public funding, prejudice and skeptical attitudes of the lay and medical profession, as well as reluctance of pharma industry. This lecture will present a brief history of the efforts to develop male contraceptives and introduce the most promising approaches currently under development.

## **CONTRACEPTION FOR ADOLESCENCE – CHALLENGE FOR THE GYNAECOLOGIST**

George Creatsas

We have not received the abstract until the deadline.

## **2.4. SESSION #3 INFERTILITY AND HABITUAL ABORTION**

### **NON-INVASIVE PREIMPLANTATION GENETIC SCREENING (PGS)**

Wilfred Feichtinger

*Wunschbaby Institut Feichtinger*

*(Wien-Hietzing, Austria)*

We have not received the abstract until the deadline.

### **THE ROLE OF TIME-LAPSE EMBRYO MONITORING IN EMBRYO SELECTION DURING IN VITRO FERTILIZATION**

Péter Kovács

*Kaali Institute, IVF Center*

*(Budapest, Hungary)*

*Body of the abstract:* IVF is considered successful when a healthy full term baby is born. Despite significant improvements still only an about 10-40% implantation rate and an about 30% clinical pregnancy rate can be expected. 85-90% of the embryos created throughout the process will never implant.



There is pressure on the embryologist who has to identify the embryo with the highest implantation potential. Currently the standard selection method relies on daily one observation under light microscope by removing the embryos from the incubator. Pronuclear morphology, cleave patterns, cell symmetry, fragmentation and blastocyst morphology are assessed this way. This snapshot evaluation once a day only provides us with limited information. Time-lapse embryo monitoring (TLM) allows us to continuously observe the embryos without removing them from the optimal culture conditions. This way significantly more information can be gained about their morphology and kinetics.

Multiple, mostly retrospective, studies evaluated various morphokinetic parameters in embryos with known implantation data. Based on the most important parameters algorithms were built that are supposed to help embryo selection. Some of the algorithms favor early kinetic markers, others found late kinetic markers to be predictive and yet others incorporated morphology too in their model. There is still only limited RCT data available that studied the benefits of these models. During the presentation time-lapse technology, the various predictive kinetic/ morphologic markers and the available retrospective/ RCT data using time-lapse technology will be reviewed.

## **PLATELET ASSOCIATED REGULATORY SYSTEM (PARS)**

*Bódis József*

*University of Pécs*

*(Pécs, Hungary)*

We have not received the abstract until the deadline.

## **ENDOSCOPIC DIAGNOSIS OF INFERTILITY**

*Gábor Németh*

*Department of Obstetrics and Gynaecology, University of Szeged, Albert Szent-Györgyi Medical Centre*

*(Szeged, Hungary)*

Advances of endoscopic surgery have revolutionized our approach to the diagnosis and treatment of infertile patients. Endoscopy is used world-wide to investigate infertility. It is a minimally invasive surgical technique used in infertility diagnosis and treatment and generally accepted that endoscopy

(hysteroscopy, laparoscopy) is the gold standard in diagnosing causes of infertility. Anatomical structure of female pelvis is suitable for laparoscopic visualization, because the uterus, fallopian tubes and ovaries are located at the very bottom of the abdomen. Laparoscopy allows seeing abnormalities that might interfere with a woman's ability to conceive a pregnancy. Infertility diagnostic and operative laparoscopy help evaluate gynecological problems such as uterine fibroids, structural abnormalities of the uterus, endometriosis, ovarian cysts and adhesions. Generally endoscopy is used to inspect the pelvic organs, and the uterus (diagnostic laparoscopy-hysteroscopy), and often to perform surgical procedures (operative laparoscopy-hysteroscopy) at the same time. Complicated endometriosis, pelvic adhesions, removal of large ovarian cysts and fibroids should be performed. It appears that endoscopic surgery for infertile patients is efficacious and can produce better results than traditional procedures used previously.

### **THE DARK SIDE OF PREMATURE BIRTH**

*Peter Chitulea*

*University of Oradea*

*(Oradea, Romania)*

The plurifactorial etiology of preterm birth resembles the starry sky of night in which we see a lot of stars, but shines against the dark background of unknown space. Is there in this dark space black holes, planets, unseen dark matter, which we intuit but you can not see them.

Etiological factors are influencing this complex psychosomatic pathology, but their existence can only be inferred suspected or due to their influence on the certainly known etiological factors .

The role of psychosomatics is to investigate and to map this unknown part of etiology of preterm labor that it becomes accessible to prevention and therapy.

Premature birth is one of the major challenges of modern obstetrics. This is: Extremely varied plurifactorial etiology, threat in over 10% of total number of pregnancies, maternal, anatomical, ovular causes.

Thus, psychosomatic and social etiology is present, besides other medical causes, in almost all cases of premature birth.

40 years ago, Emil Papernieck, through his risk score of premature birth, pointed out the following causes: Chronic alcoholism, tabacosis, drug addiction, unfavorable social status, low cultural level, dysfunctional families, hard work, commuting, chronic fatigue, inadequate housing, unfavorable microsocioal environment, legislation, health policies, unwanted pregnancy.

The importance of the psychological rejection of the pregnancy was underlined by Michele Delcroix and Arienne Feldman in 1990-“Naitre aujourd’hui”. In the early ,90s in France, Professor Emil Papernieck conducted one of the most impressive medical experiments of the past century. Papernieck, starting from the premise that psychosomatic and psychosocial etiology represent a major cause of premature birth, proposed a national experiment designed to decrease the percentage of premature births in France.

“Action -S.O.S. Bébé” consists in covering the entire territory of France with regional phone centers served 24 of 24 hours and 365 days a year, by complex teams consisting of doctors, psychologists, social workers and lawyers. In these centers, pregnant women were advised to call anytime, day or night, if they had a problem, regardless of its nature. By this method, within 5 years, between 1989 and 1995, in France, the number of premature births was reduced to half.

Prevention is cheaper than therapy. Prevention of premature birth, and in a more general sense, perinatal medicine, represents the area in which this truth becomes even more pregnant. When we talk about prevention and treatment of premature birth, we actually talk about the quality of the future members of a nation.

What can be done? The economic level and, consequently, the social level, of a country, can be improved only over a very long period. The material facilities of the national health system are also a long-term strategic task. They represent long-term desiderata, and are dependent on political and macro-economic factors and decisions.

Is this attitude change possible in today’s Romania? A radical attitude change in the sense of modern holistic medicine implies a radical attitude change in the medical education at all levels. Significant improvement in the percentage of premature births. Decrease of all dramatic, sometimes tragic consequences of this “social disease”, for families, communities and, ultimately, for the entire nation.

Improving directly the quality of the members of a nation, and all money spent in this sense represents an investment in its future.

### **IMMUNOLOGIC BACKGROUND OF RECURRENT SPONTANEOUS ABORTION: DIAGNOSIS AND THERAPY**

Győző Petrányi

*Histocompatibility and Transplantation Immunology, National Institute of Haematology and Immunology (Budapest, Hungary)*

**Objective.** Current presentation summarizes the immunological diagnostic methods and treatment options for the successful Intravenous Immunoglobulin (IVIg) and thrombocyte transfusion immunotherapy in recurrent spontaneous abortion (RSA) patients.

**Methods.** 191 couples with recurrent miscarriage were selected for the study. Gynaecological, endocrinological, haematological, genetic, infectious and autoimmune backgrounds were excluded. Immunological tests were performed to identify cases with immune/alloimmune aetiology (IMA/RSA). IVIg, thrombocyte transfusion (PST) and a combination of the above (IVIg+PST) were administered to IMA/RSA patients.

**Results.** In RSA patients with immune/alloimmune background, partner specific CTL precursor frequency was ten times higher and NK cell activity was also significantly higher than in normal controls. In the sera of those patients FcγRIII blocking activity (15.9%) was decreased compared that of controls (49.5%). Partner specific MLC reactivity was higher compared to the non related pool in the majority of cases. Concerning the patient's sera bidirectional effect was observed. While 63% of the patients' sera expressed enhancing effects on the basic partner specific MLC reactions, but in 24% of the cases maternal sera blocked the antipaternal MLC reactivity in general. The overall efficacy of immunotherapy (IVIg, PST and combination) in selected immune/alloimmune RSA cases was 91.5%.

## 2.5. SESSION #4 MENOPAUSE

### LONG-TERM METABOLIC EFFECTS OF PCOS

Juha Tapanainen

*Department of Obstetrics and Gynecology, University of Helsinki and Helsinki University Hospital  
(Helsinki, Finland)*

Polycystic ovary syndrome, PCOS, is the most common endocrine disorder at fertile age affecting 6-18% of women. It is increasingly prevalent condition, under-recognised and under-diagnosed, with serious health impacts. Women with PCOS present with anovulatory infertility, insulin resistance and hyperandrogenism. Furthermore, obesity is common among these women. PCOS is 80% heritable, and its health burden extends to the next generation, with significant adverse impacts on children of affected mothers. PCOS is usually manifested during adolescence and therefore these women with high reproductive and metabolic risks would benefit from early diagnosis.

The recent data indicate that unfavourable changes associated with PCOS persist beyond menopause, when the symptoms related to PCOS itself have already disappeared, and this potentially has long-term health effects. Androgen levels are known to remain stable or even increase as women enter premenopause whereas at the same time estrogen levels decrease dramatically. As women become more androgenic several features like insulin resistance, chronic inflammation, abdominal adiposity and dyslipidemia worsen. The impact of hyperandrogenism in the postmenopausal period is not well understood, but hyperandrogenism together with persisting metabolic disturbances may expose women with PCOS to type 2 diabetes, metabolic syndrome and cardiovascular diseases

### OBESITY AND CONTRACEPTION

David Serfaty

We have not received the abstract until the deadline.

## OSTEOPOROSIS DIAGNOSIS AND TREATMENT

*Santiago Palacios*

*Palacios Institute of Women 's Health.*

*(Madrid, Spain)*

The most common consequence of osteoporosis that is frequently overlooked is the increased risk for fracture and the secondary morbidity and mortality caused by these fractures. For this reason, the objective of osteoporosis treatment is to prevent new fractures, and when present, to minimize symptoms, improve functionality and optimize quality of life in the patients.

Osteoporosis is currently diagnosed upon the measurement of bone density by DEXA. WHO has defined the diagnosis of osteoporosis as a T score  $\geq -2.5$ . Patients with a low bone density have an increased risk of fracture. This, however, fails to identify the features which can put an individual at risk for fracture, since bone fragility depends on morphology, architecture and remodelling. Hence it was decided to assess the relationship of risk factors, along with bone mineral density and to point fracture probabilities (FRAX). Nowadays the important thing is to detect people at risk, where treatment has a positive benefit/risk. Therefore, and in accordance with the guidelines of the National Osteoporosis Foundation, treatment is indicated in the following conditions:: 1. Hip fracture or column (clinical or morphometric); 2. T-score less than or equal to  $-2.5$  at the hip or spine (ie, before the diagnosis of osteoporosis); 3. Low bone mass (T-score between  $-1$  and  $2.5$  in spine or hip) and a probability of hip fracture greater than or equal to 3%, or osteoporotic fracture greater than or equal to 20%, according FRAX (OMS algorithm); 4. If the clinical diagnosis and/or patient preferences indicate to establish a treatment below the thresholds of FRAX.

There are no fixed norms or established protocols to choose a particular drug or methodology. Decisions regarding when to start and what type of treatment to deliver are based on the need to reduce the risk for fractures. For each individual, in addition to BMD and other major risks, the following factors may play a deciding role: renal function, drug allergies, comorbidities, previous treatments, contraindications, secondary effects of drugs and cost. Thus, it is possible to establish the risks and benefits of a particular drug for each patient. Moreover, it is recommended to consider the importance of improved adherence. A chronic disease that needs many years of treatment, osteoporosis requires the use of individualized methods and sequential treatment.

Osteoporosis is a chronic disease which may require treatment for many years and requires not only individual management but often sequential or combination treatments. For many years, we have used antiresorptives as monotherapy, positioning each according to its mechanism of action, vertebral and non-vertebral efficacy and its side-effects. The appearance of the anabolic parathyroid hormone (PTH) agent in its two presentations (teriparatide (PTH1-34) or PTH1-84) has opened new possibilities. Anabolic agents are an attractive option due to direct stimulation of bone formation. On the other hand studies show that after anabolic drug, the BMD quickly reduces. This reduction can be prevented by administering anti-resorptive. On the other hand the combination of anabolic plus antiresorptive, to date, not been shown to be superior to single use of either.

Whether to maintain or modify antiresorptive treatment depends very much on BMD. Bone density should be reassessed at least after 2 years and, if it is stable or increased, can be rechecked after 5 years. If BMD decreases after 2 years and there is a fracture, the physician should check whether there is compliance with treatment; if compliance is good, it is important to check intake of calcium (1200 mg) and vitamin D (600 – 800 IU) and exercise. In women who are losing bone, the physician should consider secondary causes of bone loss and associated pathologies such as a high intake of alcohol. Once secondary causes of loss of bone mass are excluded, a more potent antiresorptive agent or sequential or combination therapy with an anabolic agent should be considered. BMD must be checked again after a year to assess response. If it is stable, it can be rechecked at 5 years. According to current evidence, switching to teriparatide alone or in combination with an antiresorptive treatment appears to provide additional benefits in relation to different parameters such as BMD and bone strength. However, it should be noted that, with respect to anabolic therapy, either combined or sequential, there are no studies with determination of fracture as the main outcome variable. Currently, parathyroid hormoneanalogs are usually indicated for 18 – 24 months. Sequentialtherapy with an antiresorptive agent is then recommended to maintain the increases in bone mass and support secondary mineralization of the newly formed bone.

## **ATROPHIC VAGINA ASSESSMENT AND TREATMENT**

*David F. Archer*

*Clinical Research Center, Eastern Virginia Medical School | Department of Obstetrics & Gynecology  
(Norfolk, England)*

We have not received the abstract until the deadline.

## **IMPACT OF AGE AND HORMONE THERAPY ON CARDIOVASCULAR RISK**

*Hanna Salvolainen-Peltonen*

We have not received the abstract until the deadline.

### **3.1. SESSION #5 OVARIAN CANCER**

#### **THE PATHOGENESIS OF EPITHELIAL OVARIAN CANCER**

*S. Sinan Ozalp*

*Dept. Of Obstetrics and Gynecology, Medical Faculty, Eskisehir Osmangazi University  
(Eskisehir, Turkey)*

Historically, ovarian cancer was believed to originate from the ovarian surface epithelium (OSE). Proposed back in 1971, “incessant ovulation” hypothesis suggests that, the process of ovulation involves repeated minor trauma to the covering epithelium as well as repeated exposure of the ovarian surface to the estrogen rich viscous follicular fluid. Epidemiological data in human beings may be suggestive of a possible relationship between the process of ovulation and the development of the common ovarian neoplasm. In the absence of ovulation, ovarian neoplasms of surface epithelial origin are very rare. But failure of radical surgery and chemotherapy to reduce the overall mortality of ovarian cancer can be attributed to a lack of understanding of its pathogenesis. Most women have advanced disease at the time of diagnosis, and ovarian cancer is the most lethal gynecological malignancy. Intensive efforts to develop effective screening strategies have not so far met with success. There is a need to re-evaluate the potential of prevention strategies. Accumulated evidence from recent studies strongly suggests that the cell of origin of most EOCs originate from extraovarian organs. It appears that both high-grade



and low-grade serous carcinomas are probably derived from fallopian tubal epithelium. Also ovarian endometrioid and clear cell carcinomas may arise from ectopic endometrium implanted on the ovary. The true primary ovarian neoplasms include only germ cell and gonadal stromal tumors. Although several experiments are still needed to confirm this model, the new paradigm of the extraovarian origin of EOCs will have profound implications for research and clinical management.

### **SCREENING & NOVEL MOLECULAR MARKERS IN OVARIAN CANCER: ASSESSMENT OF MIRNA196 POLYMORPHISM**

*Róbert Póka*

*Department of Obstetrics and Gynaecology Faculty of Medicine, University of Debrecen  
(Debrecen, Hungary)*

Epithelial ovarian cancer is the most common cause of death among female genital malignancies. Poor treatment results are primarily caused by late diagnosis of disease and the lack of effective treatment methods for recurrent disease. The aim of this study was to analyse miR196a polymorphism in patients with high-grade serous epithelial ovarian cancer (EOC) and in healthy controls.

Methods: Peripheral blood samples were drawn from 33 EOC patients and 21 controls. DNA was isolated by silica adsorption method. *miR-196a* (rs11614913) SNP were analysed by melting point analysis of PCR products in LightCycler 96 using LightSnip kit (TibMolbiol, Berlin, Germany). Frequencies of alleles and genotypes were compared by  $\chi^2$ -square test.

Results: Frequencies of TT, TC and CC genotypes were 20,51%; 35,89% and 43,58% in cases, and 15,78%, 52,63% and 31,57% in controls, respectively.  $\chi^2$  – square test  $p=0,041$ .

Conclusion: The current results provided evidence that T>C polymorphism in miR-196a-2 precursor may have a role in the development and progression of EOC. SNP analysis of miR-196a 864 may serve as a potential biomarker and screening tool for EOC. Further studies are required to assess sensitivity and specificity in the general population.

## FRONT LINE TREATMENT OF OVARIAN CANCER

*Dimitrios Lazaris*

Nearly 70% of patients with epithelial ovarian cancer (EOC) have advanced disease (stage III or IV) at diagnosis. Surgery is widely accepted as a critical component of treatment for these women. Residual disease (RD) following a primary cytoreductive effort is negatively associated with clinical outcomes including response to adjuvant chemotherapy, progression-free survival and overall survival. The definition of “optimal” debulking has varied between <2 cm and 0 cm (complete resection or R0). Recent reports suggest that the best metric is the distinction between R0 and any residual disease. Accurate predictors of surgical outcome could substantially impact management of ovarian cancer by guiding patients with highest likelihood of having RD to neoadjuvant chemotherapy (NACT) with the potential for interval debulking surgery (IDS) later.

Although the value of CRS is well established, the ideal time for primary treatment is unknown. At least two trials have compared primary debulking surgery (PDS) with IDS in patients with advanced EOC, neither of which reported a difference in survival with regard to the timing of debulking surgery, reporting fewer surgical complications and more patients undergoing R0 in favor of IDS. Yet, IDS cannot be considered the standard of care for all patients with stage IIIC or IV disease.

A subgroup analysis of the EORTC trial demonstrated worse survival for patients with stage IIIC disease and largest metastatic tumor diameter >5 cm who were treated with IDS, suggesting a detrimental effect when administering NACT to certain stage IIIC patients. One explanation is the risk of platinum resistance when chemotherapy is used to treat large-volume disease before surgery versus chemotherapy for small or microscopic RD after debulking surgery.

This lecture will focus on the role of neoadjuvant chemotherapy in advanced stage EOC with a special emphasis in prognostic and predictive markers.

**IMAGISTIC METHODS USED FOR DIAGNOSIS OF OVARIAN CANCER AND ENDOMETRIOSIS**

Marius Craina

We have not received the abstract until the deadline.

**SALPINGECTOMY FOR OVARIAN CANCER PREVENTION. FERTILITY SPARING SURGERY IN CANCER**

Aleksandar Stefanović

*Clinics for Gynecology and Obstetrics, Clinical Center of Serbia*

*(Beograd, Serbia)*

Ovarian Cancer (OC) is the second most frequent gynecological cancer and leading cause of mortality in gynecological oncology. Since all to-date investigated screening strategies for OC have failed, other preventive approaches have been proposed. Recent discoveries (from the studies evaluating prophylactic bilateral salpingo-oophorectomy in BRCA1 and BRCA2 mutation carriers) indicate that high-grade OC originates from the fallopian tube epithelium, and not from the ovarian tissues. These data raised numerous questions, ie should this option be offered only to high-risk groups or to both low-risk and general population; does benefit of this strategy exceed risks of complications of unnecessary surgeries etc. To date, there is no sufficient data to established general recommendations but ongoing efforts raise hope.

Standard treatment of OC is based on radical surgery (hysterectomy, bilateral salpingo-oophorectomy, omentectomy, pelvic and paraaortic lymphadenectomy, peritonectomy etc) and chemotherapy. During the past few decades the trend of delayed reproduction has been set and it is even more enhanced with development of assisted reproductive technologies. The principles of radical surgical approach and reproductive potential are in collision. As a consequence, a fertility sparing approach to gynecological malignancies has been development, especially to OC patients. This strategy consists of unilateral salpingo-oophorectomy, removal of any visible disease and complete surgical staging. This approach can be offered to very narrow selection of patients based on the assessment of oncological risk that accompanies fertility sparing treatment and features of the disease (low grade, low stage, low risk hystological subtype of cancer).

## 3.2. SESSION #6 YOUNG DICZFALUSY FELLOWS

### REPORT OF ACTIVITY OF THE YOUNG DICZFALUSY FELLOWS

*Cristian Furau; Aleksandra Vejnovic*

We have not received the abstract until the deadline.

### STUDY OF KNOWLEDGE ABOUT THE CONTRACEPTIVE METHODS AT THE MEDICAL STUDENTS IN ARAD COUNTY

*Cristian Furau*

*Department of Obstetrics & Gynecology of Arad, „Vasile Goldis” Western University of Arad (Arad, Romania)*

Introduction. Fifty Percent of all pregnancies in the United States are unintended. Modern and effective contraceptives can greatly reduce the risk of unintended pregnancy. Future unprepared doctors will probably not improve the rate of unintended pregnancy.

Objective. The aim of the current study is to explore medical students' knowledge, perception and attitudes regarding contraception use in Arad University, Romania, and to find if there are background factors predisposing for lack of awareness and negative attitudes.

Materials and Methods: Cross sectional descriptive study was conducted among 300 medical students studying in Arad University from the first of January to end of April 2016. A questionnaire comprised of 50 item questions divided into four sections was used.

Result: Participant ages mostly were between 20 to 24 years. There were slighter more females than males. The participants were Romanian 149, Italian 46, Middle-East 41, others 64, Christian (46.7%) and Muslims (26.7%). Most of the Students were not married (87.3%). An advanced year was statistically associated with higher knowledge. The attitudes means did not statistically differ according to the advanced year of studying. Sex and race affect the knowledge and attitudes about contraception, while age had not influence. Religion did not seem to affect the means of knowledge although religion affects the attitudes means.

Conclusion: The awareness about modern contraception among medical students found to be moderate and the attitude score was positive, but there is a little gap in information on contraception knowledge.

## **THE INCIDENCE OF ENDOMETRIOSIS IN WOMEN WHO HAD NEONATAL UTERINE BLEEDING – COHORT STUDY**

*Aleksandra Vejinovic*

We have not received the abstract until the deadline.

## **LONGER ORAL CONTRACEPTIVE USE MIGHT LOWER THE RISK FOR DOWN SYNDROME**

*Gyula Richárd Nagy*

*Semmelweis University, 1<sup>st</sup> Department of Obstetrics and Gynecology  
(Budapest, Hungary)*

*Objectives:* Maternal trisomy 21 ovarian mosaicism might provide the major causative factor for fetal Down syndrome. The small proportion of trisomy 21 oocytes reduces slower than normal disomic ones, and the maternal age effect can be based on an accumulation of them in the ovarian reserve. By lowering the number of unnecessary ovulations, a greater portion of disomic oocytes might be saved.

*Materials & Methods:* Between September 2009 and September 2011, we performed genetic amniocentesis for fetal chromosomal analysis in 5222 pregnancies. During the study period we detected 119 structural or numerical chromosomal abnormalities. From this group, we selected those 37 patients for whom amniocentesis was done only due to advanced maternal age or advanced maternal age plus an elevated risk from a prenatal screening test, and for whom fetal trisomy 21, 18 or 13 was confirmed. We had 92 control patients. Detailed information was taken from those factors that influence the number of ovulations in reproductive life.

*Results:* From the factors checked, patients with a trisomic fetus had a shorter overall length of oral contraceptive pill use before the trisomic pregnancy (3.4 vs. 6.0 years,  $p < 0.0014$ ), and the estimated number of ovulations was higher (274.6 vs. 224,  $p < 0.0003$ ).

*Conclusion:* We found that a history of longer oral contraceptive pill use and fewer ovulatory cycles were associated with fewer common trisomies of the fetus. Additional research is needed to rule out potential confounding factors, but our results are consistent with the maternal ovarian mosaicism causal model.

## **PAIN, QUALITY OF LIFE AND SEXUALITY IN PATIENTS WITH ENDOMETRIOSIS TREATED BY LAPAROSCOPY**

*Peter Koliba jr*

*Dpt. of Gynecology and Obstetrics, General University Hospital  
(Prague, Czech Republic)*

Introduction: Endometriosis is chronic non-malignant estrogen dependent disease which is characterized by the growth of endometrium like tissue outside the uterine cavity followed by chronic inflammatory reaction in the place of implantation. It affects approximately 10% women in reproductive life and by corresponding symptoms it significantly impairs their quality of life.

Objectives: We tried to investigate the impact of endometriosis on quality of life (QOL) and sexuality and evaluate the efficiency of laparoscopic surgery on symptoms relief and improvement of QOL and sexuality.

Methods: 30 patients with clinical diagnosis of endometriosis filled out the questionnaires including VAS (Visual Analogue Scale) concerning non menstrual pain, dysmenorrhea, dyspareunia, dysuria and dyschesia, WHOQOL-Bref questionnaire and Arizona sexual experience scale (ASEX) preoperatively and 6 months after laparoscopic surgery. 30 healthy controls filled out questionnaires WHOQOL-Bref and ASEX.

Results: 6 months after laparoscopic treatment a significant reduction in pain, per VAS scores, (dysmenorrhea  $p < 0,01$ , dyspareunia  $p < 0,5$ ) and significant improvement in selected aspects of WHOQOL-Bref questionnaire (impact of pain  $p < 0,01$ , negative feelings  $p < 0,5$ ) were recorded. We didn't record any significant change in ASEX scores after laparoscopic treatment.

Conclusion: Patients with endometriosis have lower quality of life than healthy population. Therapy of endometriosis by laparoscopic surgery significantly improve quality of life of patients, however in our study we didn't observe any significant effect on patient's sexuality.

## **SURGICAL MANAGEMENT OF OBSTETRICAL AND GYNECOLOGICAL HEMORRHAGES**

*Rares Gherai*

We have not received the abstract until the deadline.

## **SEXUAL EDUCATION FOR OBSTETRICANS AND GYNECOLOGISTS**

*George Toth, Craina M., Anastasiu D.*

We have not received the abstract until the deadline.

## **EXAMINATIONS OF PLACENTAL 3-DIMENSIONAL POWER DOPPLER INDICES AND PERINATAL OUTCOME IN PREGNANCIES COMPLICATED BY INTRAUTERINE GROWTH RESTRICTION**

*András Molnár*

*Department of Obstetrics and Gynecology, University of Szeged  
(Szeged, Hungary)*

### Introduction

Our goal was to examine placental vascularisation using 3-dimensional power Doppler (3-DPD) technique in the second and third trimester of pregnancies complicated by intrauterine growth restriction (IUGR).

### Material and methods

Vascularisation of placentas was assessed in the second and third trimester of 52 pregnancies complicated by IUGR as well as 171 normal pregnancies using 3-DPD technique. We have evaluated the correlation between specific parameters and gravidity, parity, body-mass index, placental localisation, estimated fetal weight, birth weight, emerging intrauterine complications, umbilical cord arterial pH and Apgar score. We applied the Merce-type sonobiopsy and volumes were analyzed with Virtual Organ Computer-aided Analysis (VOCAL) programme.

### Results

3-DPD vascularisation indices of the placenta showed significant differences between the study group and control group. Placental vascularisation is lower in pregnancies complicated by IUGR than in normal ones. Deterioration of the vascularisation correlates to perinatal outcome.

### Conclusion

The examination of placental vascularisation by 3-DPD technique can be a method to distinguish perinatal complication in IUGR pregnancies

## THE EFFECT OF COMBINED ORAL CONTRACEPTIVES ON THE HEMOSTATIC SYSTEM

Marko Novakovic

Department of Pathophysiology and Laboratory Medicine, Faculty of Medicine, University of Novi Sad (Novi Sad, Serbia)

**Introduction:** The use of combined oral contraceptives (COC) is considered as risk factor for venous thromboembolism (VTE). The potential prothrombotic effect implies an elevation in the level of coagulation factors, the decline in the level of anticoagulant proteins, and increased resistance to natural anticoagulants, as well as changes in fibrinolytic system, which represents the pathophysiological mechanism of thrombogenic action of COC.

**Aim:** The aim of this study was to investigate the effect of combined oral contraceptives on the laboratory parameters of the hemostatic system.

**Material and Methods:** The study included 90 females aged 19-25 years, 45 of them taking combined oral contraceptives at least 3 menstrual cycles backwards and 45 age and body-mass index matched healthy controls. Following laboratory parameters were determined: complete blood count with percentage of reticulated platelets, aggregation of platelets and coagulation parameters: activated partial thromboplastin time (aPTT), prothrombin time (PT), thrombin time (TT), fibrinogen, D-dimer, von Willebrand factor, antithrombin, and ETP parameters: - lag time (t<sub>lag</sub>), time to peak (t<sub>max</sub>), peak thrombin generation (c<sub>max</sub>) and ETP area under curve (AUC). Data distribution was tested by Kolmogorov-Smirnov test. Two-sided unpaired t-test was used for comparison of means between the groups and Mann-Whitney test was used to compare median values between groups if data were not normally distributed.

**Results:** Percentage of reticulated platelets and the level of induced platelet aggregation were higher in the study group, but neither difference was statistically significant. aPTT and PT were significantly shortened in the study group (*aPTT*  $0,9082 \pm 0,06$  vs  $0,9646 \pm 0,08$   $p < 0,05$ ; *PT*  $1,0364 \pm 0,06$  vs  $1,0755 \pm 0,07$   $p < 0,05$ ), and TT in the study group was shorter than in the control, but without statistical significance. Level of fibrinogen ( $3,4111 \pm 0,73$  vs  $3,0922 \pm 0,68$   $p < 0,05$ ) and D-dimer ( $0,3182 \pm 0,20$  vs  $0,2313 \pm 0,09$   $p < 0,05$ ) were significantly elevated in the study group, the level of von Willebrand factor



was elevated ( $129,49 \pm 42,48$  vs  $117,94 \pm 28,74$  *n.s.*) and antithrombin was lower ( $103,36 \pm 9,06$  vs  $104,71 \pm 10,46$  *n.s.*), but without statistical significance. ETP-AUC was statistically significantly increased in the OC users ( $111,40 \pm 17,32$  vs  $93,32 \pm 18,41$   $p < 0,05$ ), and the peak thrombin generation was higher than in controls ( $117,13 \pm 32,02$  vs  $107,12 \pm 23,68$  *n.s.*), but without statistical significance. No difference in time to peak or lag time was found.

Conclusion: The use of COC leads to the changes in functional platelet reactivity and in concentration of coagulation factors, changing the balance within the hemostatic system in the direction of hypercoagulable state.

Key words: Contraceptives, Oral, Combined; Hemostasis



# 10<sup>th</sup> Annual Meeting of the Egon and Ann Diczfalusy Foundation

## Posters

**P 01 Vaginal cones in pelvic floor dysfunction: a right cost-effective choice**

F. Villani, E. Moratti, B. Minopoli, A. Fatuzzo, A.L. Tataru, V. Villani, L. Fatuzzo, C Furau.

<sup>1,3,5,8</sup> *University of West Vasile Goldis of Arad (RO)*

<sup>4</sup> *University La Sapienza Roma (IT)*

<sup>7</sup> *Department of Obstetrics & Gynecology „Riccardo Guzzardi” Hospital Vittoria, RG (IT)P 02*

**Introductions:** These are the first results of an ongoing multicentrum observative trial to determine the effectiveness of vaginal cones (VC) in pelvic floor (PF) training. Because of a high economic burden of urine incontinence in Europe, we chose VC as a good cost-effective method for the training of PF muscles in women, to manage urinary incontinence and/or sexual dysfunctions. This methodology allows freedom and empowerment to women, thanks to the autonomous use of the device without any additional costs for the National Health System.

**Objectives:** Validating the cost-effective use of VC in PF training.

**Material and methods:** We carried out a test based on a newly developed type of VC with 37 women (25-78 years old), who signed a consent form and trained PF muscles with a set of 3 VC after explanation of exercises. They were classified according to individual scores by a Pubo-coccygeus muscle test (strength, endurance, fatigability) and Quality of Life questionnaire, at the beginning and after 3 month.

**Results:** Out of 37 women involved, 10 dropped out due to lack of commitment. Out of the 27 women left, 7 with urgency, 11 with effort, 3 with mixed problems, 24 reported a clear improvement of the pathologies, 88% successful. All 16 women with sexual dysfunctions reported a gain of sexual pleasure.

**Conclusion:** You may notice a complete training leads to an improvement of pathologies related to the weakness of the PF. The verifiable limit to the treatment is the arbitrary level of commitment. Further studies are necessary.

**P 02 Pain, quality of life and sexuality in patients with endometriosis treated by laparoscopy**

Peter Koliba jr., Michael Fanta

*General University Hospital Prague, Czech Republic*

Introduction: Endometriosis is chronic non-malignant estrogen dependent disease which is characterized by the growth of endometrium like tissue outside the uterine cavity followed by chronic inflammatory reaction in the place of implantation. It affects approximately 10% women in reproductive life and by corresponding symptoms it significantly impairs their quality of life.

Objectives: We tried to investigate the impact of endometriosis on quality of life (QOL) and sexuality and evaluate the efficiency of laparoscopic surgery on symptoms relief and improvement of QOL and sexuality.

Methods: 30 patients with clinical diagnosis of endometriosis filled out the questionnaires including VAS (Visual Analogue Scale) concerning non menstrual pain, dysmenorrhea, dyspareunia, dysuria and dyschesia, WHOQOL-Bref questionnaire and Arizona sexual experience scale (ASEX) preoperatively and 6 months after laparoscopic surgery. 30 healthy controls filled out questionnaires WHOQOL-Bref and ASEX.

Results: 6 months after laparoscopic treatment a significant reduction in pain, per VAS scores, (dysmenorrhea  $p < 0,01$ , dyspareunia  $p < 0,5$ ) and significant improvement in selected aspects of WHOQOL-Bref questionnaire (impact of pain  $p < 0,01$ , negative feelings  $p < 0,5$ ) were recorded. We didn't record any significant change in ASEX scores after laparoscopic treatment.

Conclusion: Patients with endometriosis have lower quality of life than healthy population. Therapy of endometriosis by laparoscopic surgery significantly improve quality of life of patients, however in our study we didn't observe any significant effect on patient's sexuality.

**P 03 The efficacy of individual autogenic training sessions on women's well-being, who have undergone IVF**

Zita Gyapjas<sup>1</sup>, János Zádori<sup>2</sup>, György Bártfai<sup>3</sup>

*University of Szeged, Institute of Kádli, Szeged*

Fertility problems can cause permanent unwanted changes on women's psychological state, including anxiety, depression, stigmatization, isolation. These negative states affects on well-being too. In our study we examined women's psychological states, who have participated in at least one unsuccessful in vitro fertilization. All of them and their partners were healthy too, according to recent medical science. We offered individual autogenic training sessions for women. In the case group we had 10 women, who have participated in our 11 week program. In the control group we had 10 women who have only filled out our questionnaire. Our aim was to observe the changes at the beginning and at the end of the 11 week program. We used the following questionnaires: Spielberger State and Trait Anxiety Inventory (STAI), Beck Depression Inventory (BDI), WHO Well-being Questionnaire, Fertility Quality of Life (FertiQoL). According to our findings, we had significant differences between the initial and final state. Anxiety and depression scores decreased, well-being scores increased in women who have participated in our program, and have learnt how to practice autogenic training. In the control group the measured variables got worse, or stagnated.

### **P 04 Secondary amenorrhea due to weight loss – hypothalamus hypophysis dysfunction**

Dana Stoian, C. Furau, Corina Paul, Mihaela Craciunescu, Marius Craina

*“Victor Babes” University of Medicine and Pharmacy, Timisoara, Romania*

A sufficient weight loss can induce, in almost all women, secondary amenorrhea due to dynamic dysfunction of the gonadostat.

Material comprise 28 de adolescents (mean age of  $17.2 \pm 1.7$  years) and 15 adult women (mean age of  $34.3 \pm 3.1$  years) with secondary amenorrhea induced by weight loss, there were addressed to our Endocrine Unit, starting January 2013. Inclusion criteria: spontaneous menarche, regular menses prior to the amenorrhea, recent history of weight lost, no hormonal preparation used recently. Exclusion criteria: other central/peripheral causes of secondary amenorrhea.

Method: We performed at baseline, and every 2 months in the following 12 months hormonal assays: FSH, LH, estradiol, progesterone, PRL, TSH, Ft4, anti TPO Ab., serum cortisol, midnight salivary cortisol, creatin, GFR, TGP, TGO. Intervention: supplemental therapy with analogues of natural estradiol.

Results: The weight loss responsible for secondary amenorrhea was smaller in adolescents than in adult women:  $6.8 \pm 1.21$  kg versus  $33.5 \pm 6.1$  kg. The mean BMI was lower in adolescents ( $20.67 \pm 2.18$  kg/m<sup>2</sup>sc) than in adult women ( $24.11 \pm 3.9$  kg/m<sup>2</sup>sc). The degree of central suppression was similar: LH  $1.15 \pm 0.27$  mUI/mL, in adolescents, versus  $1.28 \pm 0.11$  mUI/mL, in adult women  $p=0.67$ .

The therapeutical response was good after the first month of treatment, with menses resume in 23/25, and of 12/13 cases. The disinhibition gonadostat function was observed after a mean time of  $11.7 \pm 1.5$  months in adolescents versus  $6.7 \pm 2.1$  months, in adult women. The weight increase threshold for gonadostat disinhibition was around 2 kg, both in adolescents and adult women.

Conclusion: The vulnerability of the hypothalamus-hypophysis ovarian axis seems to be higher in adolescents.

#### **P 05 Impact of genital warts on quality of life in women**

Mladenović Segedi Ljiljana, Branislava Baturan, Bjelica Artur, Četković Nenad, Koledin Slađana

Introduction: Genital wart are the most common viral sexually transmitted infections which have significant impact on quality of life.

Objectives: The aim of this study was to evaluate impact of genital warts on quality of life and emotional and sexual well-being.

Material and Methods: A prospective study included 53 patients diagnosed with genital warts between September 2012 and July 2013, at Department of Gynecology and Obstetrics, Clinical center of Vojvodina. Electrocoagulation was used as a therapeutic method. All patients completed two questionnaire: the EQ Visual Analogue scale (EQ VAS) and the genital warts-specific CECA-10 questionnaire.

Results: The range of years among patients was from 17 to 48, the median age was 29.19 years. 71.7% of patients had a partner, 34% from them used condoms. 47% of patients didn't use any contraception. The median age of first intercourse was 17 years. The median number of life sexual partners was 4. About 30.38% smoke on average 14 cigarettes daily, since they were 17. About 30.2% was already cured from genital warts. 77% of patients had vulvar genital warts but most of them had beside them vaginal and perianal warts. Current health

state on the EQ-VAS scale was 68.7. The mean scoring for CECA-10 questionnaire was 3.53. The CECA-6 factor showed a mean of 3.63 and the factor CECA-4 showed a mean of 3.32.

Conclusions: Genital warts have significant impact on quality of life. Women showed worse quality of life in the emotional dimension.

Key words: genital warts, quality of life

### **P 06 A child today, a mother tomorrow**

Grama Emanuela, Kotroczo Andrea, Maugliani Elisa, Furau Roxana, Stanescu Casiana, Furau Gheorghe, Onel Cristina, Filimon Angelica, Dascau Voicu, Furau Cristian  
*„Vasile Goldiș” Western University of Arad, Romania*

Introduction: According to UNICEF, Romania occupies the first place in Europe concerning teenage pregnancies. Studies shows that the average sexual life of teenagers in Romania has decreased, as well as the age of their menarche, leading to an increase in teenage pregnancies.

Objective: To find out the percentage of underage mother from Arad county and the pathophysiological consequences involved.

Materials and methods: A retrospective study has been made in the clinic of obstetrics-gynecology of Arad regarding underage mothers, from 2010 to 2015. This project will be carried out using the hospital documentation, while for the statistical analysis the following programs will be used: Graph Pad Software and Epi Info 7.

Results: The percentage of underage mother from Arad represents a half of the country (4,02%) and 5,35% of teenage mothers have a spontaneous or provoked abortion. The patients are not aware of the risks, thus leading to an increased number of unmonitored pregnancies (87,61%). The lack of education leads to high number of school drop-outs (91,90%). Because of their physical and psychological underdevelopment, many of them are not able to give natural birth, therefore, there is an increased number of cesareans, as well as a higher number of premature births.

Conclusion: The down-out conclusion from this research is the following: poor sexual education, cases of school dropout, cases of child abandonment, lack of communication between parents and family doctor, high rate of abortion and increased risk of cervical cancer are issues, which can lead to an increase percentage of teenage pregnancies.

**P 07 Doppler Assessment of the Uterine Artery Blood Flow in Pregnant Women during the 11-14 Weeks Gestational Age Interval-A Statistics of 168 Cases**

V. Dașcău\*, Gh. Furău\*, C. Furău\*, Cristina Onel\*, Cristina Ghib-Para\*, Maria Pușchița\*  
 „Vasile Goldiș” Western University of Arad, Romania

**Objectives:** Uterine artery Doppler flow studies during the 11<sup>th</sup> and 14<sup>th</sup> weeks of pregnancy are important in the prediction of preeclampsia and IUGR in pregnant women and also in the prevention thereof.

**Methods:** Our study of the Doppler flow indices of the uterine arteries involves 168 patients examined in our clinic, with pregnancies ranging from 11 weeks + 0 days to 13 weeks + 6 days.

**Results:** There were 72 patients from 11 weeks + 0 days to 11 weeks + 6 days (42.86%), 43 from 12 weeks + 0 days to 12 weeks + 6 days (25.60%), and 53 from 13 weeks + 0 days to 13 weeks + 6 days (31.55%). The values of the Doppler indices were: PI  $1.75 \pm 0.79$ ,  $1.88 \pm 0.81$ ,  $1.71 \pm 0.81$ , and  $1.58 \pm 0.72$  and RI  $0.72 \pm 0.14$ ,  $0.75 \pm 0.14$ ,  $0.71 \pm 0.14$ , and  $0.70 \pm 0.14$  for the entire group and for the three intervals respectively. There were 71 (42.26%), 33 (19.64%), and 64 (38.10%) patients with bilateral, unilateral and absent uterine artery notching, respectively. The Doppler indices for the three aforementioned groups were:  $2.18 \pm 0.79$ ,  $1.63 \pm 0.72$ , and  $1.33 \pm 0.57$  for the PI and  $0.79 \pm 0.11$ ,  $0.71 \pm 0.14$ , and  $0.66 \pm 0.14$  for the RI, respectively.

**Conclusions:** The mean uterine artery PI and RI decrease from 11 weeks + 0 days-11 weeks + 6 days to 13 weeks + 0 days-13 weeks + 6 days. They also decrease from pregnant patients with bilateral uterine artery notching to those without notching. Our results are similar to those in literature.

**P 08 Genetic testing in infertile male population**

Botezatu Dragos, Sălăgean Alex, Runcan Octavia, Popescu Cristina  
 „Vasile Goldiș” Western University of Arad, Romania

*Institute of Life Sciences, Vasile Goldiș” Western University of Arad, Laboratory of Genetics.*

**Introduction:** The field of genetic research in male infertility is expanding in the last years and recommendations for genetic investigations are made by professional associations. Here we

present examples from our laboratory regarding the clinical significance of Y microdeletions testing.

**Materials & methods:** Genetic evaluation was performed by standard karyotype, FISH and detection of Y microdeletions PCR for patients with oligo- and azoospermia, combined with hormonal profile (total testosterone, free testosterone, FSH, LH, prolactine). The patients addressed the Urology Clinic in Arad County Hospital. The average age of men was 30 years. None of the patients we exposed to toxic environment at their working place. All the patients are coming from couples with reproductive failure.

**Results:** Among 33 patients tested we found 6 cases with genetic abnormalities like a mosaic Klinefelter syndrome[47,XXY/46,XY (75%/25%)]; carrier of balanced translocation 46,XY,+(11;18(p14;q21)); one patient with isochromosome 46,XY, i(Y); major deletions and minor deletions of the Y chromosome. The incidence of 18% is far above the incidence in the normal populations and higher than the one in literature. Since not all the male patients undergo genetic testing we and because we have a small lot tested the percentage is relative.

**Conclusion:** Genetic testing is useful in infertile population for diagnostic reasons and for proper counseling and should be performed more often. Early determination of the etiology and oligo- and azoospermia has two perspectives: on the one hand increases the patient chance to personalized care and on the other hand reduces costs for optimizing medical management. There still is a large percentage (30-40%) of idiopathic male infertility that must be investigated.

### **P 09 Medical Maternal Care in Arad County – what can be done?**

Daria Mazza, Alessandra Guglielmino, Furu Cristian, Tataru Ana Liana, Negru Dana, Dascau Voicu, Stanescu Casiana, Onel Cristina, Furu Gheorghe  
*„Vasile Goldiș” Western University of Arad, Romania*

**Introduction:** Nowadays in Romania there is poor maternal care assistance, for this reason an increase of knowledge regarding antenatal healthcare is needed and awareness on this subject must be raised in order to reduce mother and/or child mortality and improve maternal health. It is mainly addressed towards the gypsy communities due to their poor financial possibilities, their high rate of illiteracy and the woman's role to procreate at an early age.



**Objectives:** The goal is to establish the faults of medical maternal care in Romania and establish proper measures of health education and information to the mother and apply effective promotion and preventive interventions to decrease pre- and post-partum complications.

**Material and methods:** Data from the Department of Public Health of Arad County were used together with data and experience of the Department of Obstetrics and Gynecology of Arad County.

**Results:** In order to increase awareness about medical maternal care in Romania, we support that midwives should be empowered by increasing their active role during monitoring of the pregnancy. Secondly, an adequate standard prenatal and postnatal maternal care must be provided: offering social aid, improving life standards for patients with poor finances and early detection of high-risk patients.

**Conclusion:** Due to inadequate reproduction policies in Romania, the levels of maternal mortality are one of the highest in Europe. Additionally, the lack of prenatal examination increases this rate even more. In conclusion, improving medical maternal care requires a laborious process, which will though lead to better family planning, sexual education and use of contraception. It would also provide appropriate psychological support and prophylaxis enhancement.

## **P 10 Study of Polycystic Ovary Syndrome and Infertility in Arad County**

Vilcea Ana Maria, Popa Laura Claudia, Tataru Ana Liana, Fureau Gheorghe, Fureau Cristian  
*„Vasile Goldiș” Western University of Arad, Romania*

**Introduction:** Polycystic ovary syndrome is one of the most common endocrine malady. The estimated prevalence is between 1.5 and 20% in the female population, and it is continuously growing in the latest decades. Polychistic ovary syndrome is mostly common in women aged up to 30 years, whose menstrual cycle is not regular.

**Objective :** Is to assess the risk of PCOS by a questionnaire study and offer proper medical care to the high risk responders and try to estimate the actual rate of the disease in Arad County's population.

**Methods and materials** With the informed consent of 100 female patients, we conducted a prospective study in Arad county, in order to discover how many of the patients know

themselves diagnosed with polycystic ovary and to identify the possible complications. Results: After carrying out the study, the average age of the patients are 19 years old, with a percentage of 26% , 13% of them are 18 years old, 48% of them are between 20-25 years old and 13% of them have ages between 25- 50 years old. 13% of patients had a history of polycystic ovary, 29% of them have been diagnosed with polycystic ovary by ultrasound and analysis, while 6% patients have been trying to get pregnant until the moment but failed. The most important thing we found out from our study, is that out of these 100 patients, only a percentage of 6,3% have wanted a child until now, but couldn't procreate because of their medical condition. From our 100 patients, as main symptoms 33 % have acne; 35,48 % have pelvic pain ; 5,65 % have rapid weight gain. The main means of contraception used by our patients have been : contraceptives in a percentage of 36 % , condoms – 43 % and spermicides 1%.

Conclusion: Polycystic ovary is a very common pathology for 2016, affecting girls at puberty and women in the same time. That's why they should be diagnosed in early stages of this pathology and treated properly in the same time , to avoid the complications that are linked with polycystic ovary syndrome, from which we remind : obesity, infertility and the risk of cardiovascular disease.

### **P 11 Preterm Birth analysis in Arad Country in the period 2010-2015**

Camilla Barison, Pierfranco Cicerchia, Martina Pirrone  
*„Vasile Goldiș” Western University of Arad, Romania*

Introduction. Preterm is defined as baby born alive before 37 weeks of pregnancy. 15 millions babies are born too early every year, almost 1 million die due to complications of prematurity and many survivors face lifetime disabilities.

Objectives. Identifying the real incidence of preterm birth in Arad County and trying to standardized preterm labour assessment for more accurate and timely interventions.

Materials and Methods. It was performed a retrospective study on 1138 births under 37 weeks gestation in the Department of Obstetrics and Gynaecology in the Hospital of Arad, the data being processed from the department's data (registers of births, protocols assemblers, personal files of patients). Results. In the period 2010-2015 there were 15441 births and

the prematurity index recorded of 7.37% is great in terms of grade II clinics. Improvements in perinatal morbidity and mortality caused by premature birth can be achieved by: preconception counseling to reduce risk factors, patients with obstetrical risk identification and management of each case, screening and treatment of asymptomatic bacteriuria and application of the national protocol.

Conclusion. In a society where there is a steady decline in the birth prevent premature deliveries and reduce the mortality and morbidity of preterm borns are the main goals to reach.

**P 12 Study of knowledge concerning sexual education in representative high schools from Arad**

Mican Romela, Nati Ionel Daniel, Iuga Viorica Simona, Sandor Florin Mihai, Furu Roxana, Tataru Ana Liana, Furu Gheorghe, Furu Cristian  
*„Vasile Goldiș” Western University of Arad, Romania*

Introduction. Despite the information that has been accessible to many of us through social media, sexual education and behavior regarding teenagers was and is continuing to be a wide angled subject requesting a detailed analysis, helping us create a general image of it.

Objectives. A study overlooking sexual education and behavior of a teenager in/from Arad County.

Materials and methods. The information has been gained through an anonymous questionnaire consisting out of 35 questions for 300 high school students ( 285 actual responses out of which 172 girls and 133 boys) with a variation of age between 16 and 18 years old. The project targeted 3 significant high schools from Arad County. Colegiul Național “Moise Nicoară”, Colegiul Național “Preparandia- Dimitrie Țichindial” and Liceul Teoretic “Adam Müller Guttenbrunn”.

Results. By analyzing the statistics, we came to the conclusion that boys tend to drink more than girls, ALTHOUGH girls seem to smoke significantly more than boys do. 29% of the girls debuted their sexual activity, while 33% of boys already started their sexual life. Most of the boys chose condoms as being their preferred contraception. Differences between high schools were also noticed, as we can notice a larger number of girls from ‘Adam Muler Guterbrunn’

expressed their interest in keeping the pregnancy, rather than proceed towards abortion. Concerning the boys, none of them seemed to agree with the idea that the girls should keep the pregnancy, opting for abortion. Regarding the STD protection, out of all three High Schools, Colegiul National D.Tichindeal had the lowest percentage, with a percentage of 38% of the girls and 40% of the boys.

Conclusions. In the light of our results, we highly recommend Sex Education Classes to be more frequent and more explicit in Romanian High Schools, supporting more STD prevention campaigns.

### **P 13 Invasive cervical cancer: a failure of screening**

Tataru Ana-Liana, Altobelli Alessandra, Zaffora Clara, Popa Laura Claudia, Jompan Afilon, Gheorghe Furău

*„Vasile Goldiș” Western University of Arad, Romania*

Introduction. With a percentage of 16.2% Romania holds the highest incidence rate of cervical cancer affection in Europe. Hungary follows with 7.5%, Germany with 3.3%, United Kingdom with 2.8%. Although it is a National Program, to be implemented in 2012, Screening for Cervical Cancer in Romania is considered a failure in 2016.

Objectives: It's to stimulate the population to an adequate application of the National Program of Screening for the Cervical Cancer, in order to decrease the rate of women's Mortality and Morbidity nationally and worldwide.

Materials and methods: We processed SPSS 14.0 for Windows, MedCalc, ClusterSeer<sup>®</sup> based on cases of cervical neoplasia diagnosed in county of Arad during the period 1959-2015.

Results: Between years 1960-2015 a total of 19730 registered tumor cases have been analyzed and been processed after excluding those who have not met the required criteria for completion of the design of this study, almost 300, of which deaths were 34.28%/6765. Cervical cancer reaches its maximum in Europe in Romania with a percentage of 23.9/1000, with the lowest incidence registered in Italy with 1.2/1000. The County of Arad instead accounts a percentage of 47.5% of affection for cervical cancer but the registered mortality rates account only for the 18.8% of them.

Conclusions. The team family doctor-gynecolog has an important role in reducing the incidence of cervical cancer by improving the Screening for Cervical Cancer in Romania.

**P 14 Monitoring and Evaluation of Fetal Heart Rate via iPhone**

G. Sipka<sup>1</sup>, T. Szabó<sup>1</sup>, M. Fidrich<sup>1</sup>, R. Zölei-Szénási<sup>1</sup>, M. Jakó<sup>2</sup>, M. Vanya<sup>2</sup>, T. D. Nagy<sup>1</sup>, T. Bitó<sup>2</sup> and Gy. Bártfai<sup>2</sup>

<sup>1</sup>Department Informatics, <sup>2</sup>Department of Obstetrics and Gynaecology, University of Szeged

Recording of fetal heart rate can be reassuring for the mother about the fetus' well-being. Our smart phone application can detect, record and evaluate fetal heart rate at any time. This method is based on sound wave thus ultrasound radiation-free, and can be used all day without harming the fetus. It does not require medical assistance and easy to use at home. It reduces the frequency of necessary hospital controls, helps pregnant women to relieve stress by listening to their unborn baby's heartbeat and, improves mother-child relationship. In case of non-reassuring conditions it sends an alarming message so that further examinations are needed so as to start medical treatments in time.

**P 15 Outcome of IVF treatment in patients with poor ovarian response**

Maja Djurdjevic

*Clinic for Gynecology and Obstetrics, Clinical Center of Vojvodina, Novi Sad, Serbia*

Introduction: In IVF treatment a considerable proportion of women are faced with poor ovarian response—a low number of oocytes retrieved.

Objectives: The aim was to determine prevalence and pregnancy rate of poor responders, as well as relevant predictive factors for IVF outcome within this group of patients.

Material and methods: The research included 1599 patients and 446 of them had poor ovarian response. Their pregnancy rate, age distribution, and predictive factors such as age, BMI and anti-Müllerian hormone were analysed, but also their pregnancy prospective depending on number of oocyte retrieved.

Results: Prevalence of poor responders was 27, 89%, and they had significantly lower pregnancy rate than normal responders (21, 71% vs. 41, 34%). There is no significant difference in pregnancy rate between patients younger and older than 36 years (22% vs. 19,05%), but there clearly is between patients younger and older than 40 years (100% vs. 0%). Obese and patients with normal BMI also weren't significantly different in pregnancy rate (17,31% vs. 22,55%), but patients with AMH below and above 0,5 were (5,26% vs. 26,38%). Probability

for conception within patients with one oocyte retrieved was 0, 89%, with two oocytes 9, 44% and 12, 24% with three oocytes.

Conclusion: Poor responders have poor pregnancy prospect, especially if they are older than 40 years or they have extremely low AMH. Very important factor in their prognosis is number of oocytes retrieved. IVF, as last option for infertility treatment should not be delayed.

## **P 16 Correlation of ultrasonographic measurements and pharmacologic reactivity of umbilical vessels in normal and growth restricted fetuses**

M. Jakó<sup>1</sup>, A. Surányi<sup>1</sup>, L. Kaizer<sup>2</sup>, R. Gáspár<sup>3</sup>, D. Domokos<sup>3</sup>, G. Bártfai<sup>1</sup>

<sup>1</sup>*Department of Obstetrics & Gynecology*

<sup>2</sup>*Department of Pathology*

<sup>3</sup>*Department of Biopharmacy, University of Szeged*

Objectives: The pathophysiology of intrauterine growth restriction (IUGR) is not fully understood yet. Reduced delivery of oxygen and nutrients, or altered fetoplacental circulation can lie in the background. We compared the ultrasonographic measurements of the umbilical cord vessels to their reactivity to vasoactive agents.

Methods: Cases with IUGR due to placental malfunction were selected for case group and compared to healthy AGA controls. Placental 3-D power Doppler vascularization index (VI), flow index (FI) and vascularization flow index (VFI) was measured by VOCAL technique. We performed tissue bath experiment on these vessels.

Results: The VI<sub>mean</sub> was 4.53 (p=0.0004) in IUGR, 10.08 in controls, the FI<sub>mean</sub> was 38.48 (p=0.0115) and 49.16, and the VFI<sub>mean</sub> was 2.70 and 4.92 respectively. Serotonin elicited significant contraction in umbilical arteries at 10<sup>-7</sup>M dose in IUGR and 10<sup>-5</sup>M in controls (p<0.05), in umbilical veins at 10<sup>-6</sup>M and 10<sup>-7</sup>M dose respectively. The contraction of IUGR umbilical arteries was the most powerful (p=0.03) and it did correlate with birthweight (r=-0,5952, R<sup>2</sup>: 0,3543).

Conclusion : If all placental indices are low during pregnancy, then the odds of pathological umbilical flow is significantly high. The explanation of the different IUGR vessels' reactivity can be that serotonin is stored in perivascular fibroblasts in cords. These cords are thinner with

less Wharton's jelly, so vessels' reaction is more intensive for this substance. The correlation between the clinical outcome and the reactivity to serotonin suggests that it is one of the local humoral regulators that mediate the pressure in umbilical arteries.

**P 17 Urinary incontinence: a preventable disease. Cost-benefits assessment.**

F. Villani, B. Minopoli, A. Guglielmino, E. Moratti, V. Benini, A.L. Tataru, C. Furau  
*„Vasile Goldiș” Western University of Arad, Romania*

**Introduction:** This paper collects epidemiological and economic evidence about urinary incontinence. It is a constantly seen pathology nowadays that weighs on National Health Service balance and women's quality of life (QoL). There are today various techniques for non-surgical and surgical treatment, but studies show, though, their high economic costs.

**Objective:** The aim is to raise awareness about the prevention of urinary incontinence, which is caused by various factors, mainly by pregnancy and menopause.

**Materials and methods:** Collecting scientific research data

**Results:** Pelvic Floor Muscle Training (PFMT) is important not only as a treatment but also as a long-term prevention for pelvic floor dysfunctions such as incontinence. It should be recommended to all postpartum and menopausal women to practice PFMT, with or without the use of instruments, such as biofeedback, electrical stimulation and vaginal cones. Such approach could reduce the economic impact on the Health Service and increase women's QoL.

**Conclusions:** It is evident that PFMT is the first line treatment for urinary incontinence, but it is also a prevention method recommended to all women after pregnancy and/or menopause. This rise of awareness is addressed mainly to gynaecologists, midwives and family doctors, since it is them who are mainly in contact with the patient, to prescribe the pelvic floor muscle training with the help of purposely designed devices, at the patient's expenses, to use at home and autonomously.

## **P 18 Determinants of the reliable contraceptive use: a nationwide cross-sectional survey in Hungary**

Iván Devosa<sup>1,2</sup>, Norbert Pásztor<sup>3</sup>, Melinda Vanya<sup>2,3</sup>, Zoltan Kozinszky<sup>2,4</sup>

<sup>1</sup>Teacher Training Faculty, College of Kecskemét, Kecskemét, Hungary

<sup>2</sup>Health Research and Health Promotion Research Group, College of Kecskemét, Kecskemét, Hungary

<sup>3</sup>Department of Obstetrics and Gynaecology, University of Szeged, Szeged, Hungary

<sup>4</sup>Mediteam Corporation

**Objective:** The purpose of this study was to investigate the contraceptive practice and sociodemographic determinants of employment of contraceptive methods among sexually active women.

**Design and methods:** A randomly selected representative sample of 4542 women aged 15-49 years from the Hungarian population participated in a prospective web-based and postal questionnaire survey. Women completed self-report questionnaires on sociodemographic characteristics, contraceptive practice and sexual activity between June and July 2015. Study population comprised sexually active women in the last three months, so pregnant women, women in the first postpartum year, women with impaired fertility and those who wanted to be pregnant were not included in the analysis. The contraceptive methods used by the women in the past 3 months were of interest. Oral contraceptives, intrauterine devices, male/female sterilization, vaginal ring, plaster, implant and injection were regarded as reliable methods, while barrier methods, periodic abstinence, withdrawal, spermicides, vaginal douche or no method were considered less reliable methods based upon the Pearl index.

Factors associated with the use of reliable contraceptives were studied. Multiple logistic regression analysis was applied to evaluate the factors influencing the contraceptive practice of women in reproductive age. Informed consent was obtained by email or written form via post.

**Results:** The mean age of the women was 29.4 years ( $\pm 8$ ), and 77% reported urban residents. The rate of use of reliable methods (hormonal contraceptives, intrauterine devices or sterilization) was 43%, while no method was used by 4.7% of the participants. Most women were married or lived in a long-term relationship (74.9%). Slightly more than half the women



self-identified as secondary educated (59%) and one third was higher educated. A majority of women had  $\leq 10$  sexual partners during their lifetime (84.4%) and the vast majority (96.2%) had only one partner at a time. They had stable sexual partnership (91.1%) predominantly and almost one tenth claimed that they had only occasional partner (8.9%). Eighty-nine per cent reported weekly or more often than sexual activity and 10.5 % had monthly sexual activity. Over half of the women (54.5%) had delivered at least one baby, and 25% had had at least one previous abortion. Future child wish was claimed by more than half of the participants (59%). Nearly half of the respondents lived in a good or average financial situation. Average age at first sexual intercourse was 17 years.

Logistic regression indicated that high income was favourable for the choice of modern contraceptive methods (adjusted odds ratio (AOR): 1.1), like the increased sexual frequency (AOR:1.1). The number of lifetime partners (AOR:0.99) and sexarche (AOR:0.94) was correlated inversely with the use of reliable contraceptives. Previous abortion (AOR:1.4) or delivery (AOR:1.58) was correlated significantly with an increased chance of reliable method use. Women with future child wish are significantly less prone to the use of reliable methods (AOR:0.70).

Conclusion: To the best of our knowledge, this is the first large scale representative report describing the contraceptive preferences in Hungary as a result of complex interplay between sociodemographic and sexual characteristics.

**P 19 Urinary incontinence: a preventable disease. Cost-benefits assessment.**

F. Villani, B. Minopoli, A. Guglielmino, E. Moratti, V. Benini, A.L. Tataru, C. Furau

<sup>1,2,3,6,7</sup> *University of West Vasile Goldis of Arad, Romania*

Introduction: This paper collects epidemiological and economic evidence about urinary incontinence. It is a constantly seen pathology nowadays that weighs on National Health Service balance and women's quality of life (QoL). There are today various techniques for non-surgical and surgical treatment, but studies show, though, their high economic costs.

Objective: The aim is to raise awareness about the prevention of urinary incontinence, which is caused by various factors, mainly by pregnancy and menopause.

Materials and methods: Collecting scientific research data

Results: Pelvic Floor Muscle Training (PFMT) is important not only as a treatment but also as a long-term prevention for pelvic floor dysfunctions such as incontinence. It should be recommended to all postpartum and menopausal women to practice PFMT, with or without the use of instruments, such as biofeedback, electrical stimulation and vaginal cones. Such approach could reduce the economic impact on the Health Service and increase women's QoL. Conclusions: It is evident that PFMT is the first line treatment for urinary incontinence, but it is also a prevention method recommended to all women after pregnancy and/or menopause. This rise of awareness is addressed mainly to gynaecologists, midwives and family doctors, since it is them who are mainly in contact with the patient, to prescribe the pelvic floor muscle training with the help of purposely designed devices, at the patient's expenses, to use at home and autonomously.

### **P20 Menopause symptoms in women**

Mladenović Segedi Ljiljana, Jovan Ugarković, Bjelica Artur, Koledin Slađana

Introduction: Menopause is a transitional period in woman's life. During this period woman can experience many of symptoms reduced ovarian hormone secretion.

Aim: The aim of our study was to determine the presence and severity of menopausal symptoms in women between 40-65 years.

Material and methods: The study was performed as a prospective, from December 2014 till March 2015. This study was approved by the Ethical Committee of Clinical center of Vojvodina. The interview was carried out among 40-65 years old women who visited the Clinic for Gynecology and Obstetrics, and signed informed consent. Patients were divided in three groups according to their menstrual cycle: premenopausal, perimenopausal and postmenopausal. All patients answered a Menopause Rating Scale (MRS).

Results: The median age was 53,18±7,7 years. 31% was premenopausal, 18% was perimenopausal and 51% was postmenopausal. 93% of patients gave birth, 70% had regular sexual intercourse. 64% had joint and muscular discomfort, 63% had hot flushes or sweating and 62% was depressive. 57% was anxious, 54% had sleeping problems, 52% was physical and mental exhausted, 45% had bladder problems and 44% had heart discomfort. Only 14% had sexual problems and 15% had problems with dryness of vagina.

Conclusions: Perimenopausal and postmenopausal women have more menopausal symptoms than premenopausal women. Sleep problems and depressive mood are more common by perimenopausal women, while hot flushes or sweating are more common by postmenopausal women.

Key words: menopause, menopausal symptoms, menopause rating scale

## **P 21 Endometriosis and ovarian reserve**

M. Banacu 1, C. Ionescu 1, M Dimitriu 1, I Popescu 1, R Viezuina 1

*UMF Carol Davila; Clinical Emergency Hospital St. Pantelimon Bucharest*

Introduction: Patients diagnosed with endometriosis present a significant risk for ovarian tissue damage during surgery, which may lead to infertility, reduced response to ovarian stimulation, and occasionally, premature ovarian failure.

Objectives: Evaluate ovarian reserve by measuring Anti Mullerian Hormone (AMH) and Antral Follicle Count (AFC) before and after surgery for mild/moderate endometriosis.

Materials and methods: We performed a retrospective observational study evaluating patients with mild/moderate endometriosis – that were operated in our clinic from 2012-2015. We selected 22 patients with uni/bilateral endometriomas and superficial peritoneal lesions excluding severe endometriosis. Assessment of ovarian damage during surgery was performed by comparing preoperative and postoperative ovarian markers – AMH (blood samples) and AFC (endovaginal sonography).

Results: Surgical interventions for endometriosis pose a high risk of depleting the ovarian reserve especially in young patients and in the presence of bilateral endometriomas. Also, the loss of ovarian reserve may result from the damaging effect of the pathologic process on follicle reservoir even without surgical interventions.

Conclusions: Most patients diagnosed with endometriosis are not planning to conceive at the time of the diagnosis and extensive surgical interventions can greatly affect the future fertility of these patients. Personalized counseling should be offered to all patients with endometriosis taking into account age, extent of ovarian involvement, current ovarian reserve, previous and impending surgeries for endometriosis.

## **P 22    Histopathological findings in women with ultrasound confirmed endometrial hyperplasia**

Mladenović Segedi Ljiljana, Balj Mirko

**Introduction:** Endometrial hyperplasia represent abnormal proliferation of endometrial glands. Obesity is associated with dysregulation of insulin/insulin-like growth factor activity, and other hormonal derangements, which all contribute to hyperplasia and carcinogenesis in the endometrium.

**Aim of study:** The aim of our study was to determinate the cause of ultrasound diagnosed endometrial hyperplasia.

**Materials and methods:** Research included 93 patients, 45 with bleeding, and 48 without bleeding, who underwent fractional explorative curettage or hysteroscopy. Statistical data from anamnesis and histopathological findings were analyzed too.

**Results:** The mean age was 53.78+/-11.93 years. 77.42% of patients gave birth to an average of two children. 34.41% of patients were normal weight (mean body mass index was 21.942 +/- 1.84), 29.03% was overweight (mean body mass index was 27.82 +/- 1.21) and 34.41% was obese (mean body mass index was 35.25 +/-5.53). 71.87% of normal weight patients had histopathological findings of endometrial polypus, 12.5 % had simple hyperplasia without atypia, and 3.12% had complex atypical hyperplasia. 59.26% of overweight patients had endometrial polypus, 14.81% had simple hyperplasia without atypia, 3.70 % had complex hyperplasia without atypia, 3.70% complex atypical hyperplasia and 7.40% had endometrial adenocarcinoma. In group of obese women 56.25 % had endometrial polypus, 18.75% had simple hyperplasia without atypia, 3.125% complex atypical hyperplasia and 18.75% had endometrial adenocarcinoma.

**Conclusions:** Most of the women with ultrasound confirmed endometrial hyperplasia have histopatological findings of endometrial polypus but endometrial carcinoma is closely related with obesity.

**Key words:** obesity, endometrial hyperplasia, endometrial cancer

**P23 Myo-inositol – a possible first-line treatment for PCOS?**

Ina Popescu, C.A. Ionescu, M. Dimitriu, M. Banacu

*Saint Pantelimon Emergency Hospital, Bucharest, Romania*

**Introduction.** Polycystic ovary syndrome (PCOS) is, nowadays, considered the most common cause of infertility in women, a disabling syndrome not only due to its effects on fertility but also due to its manifestations on the physical appearance and general health.

**Methods.** We researched PubMed, Uptodate and Wiley databases analyzing relevant clinical trials and reviews on the subject of PCOS and myo-inositol (MI).

**Discussions.** In our search of a treatment capable to address to the entire morpho-physiological panel of symptoms we encountered inositols. They since discovered that myo-inositol, as ovarian stimulator is associated with a pregnancy rate of 40%, it increases insulin sensitivity, lowers insulin and androgen levels having in the same time benefic effects on hirsutism.

**Our perspective.** We intend to conduct a clinical trial enlisting at least 200 patients with PCOS who want to conceive, patients who will receive myo-inositol as primary treatment. When enlisting the patients we will form groups based on the PCOS phenotype with emphasis on anthropometric and morphologic characteristics, biochemical and ultrasonographic parameters, with follow-ups at 3 and 6 month of therapy.

**Conclusions.** Even though myo-inositol is not yet appraised as an effective treatment for PCOS in international guides we believe that overlooking its benefic effects is refusing a simple yet effective treatment. We believe that its relevance is being overlooked due to the small clinical trials, this being the main reason for our intent of conducting a larger study.

**P 24 To what extent is the cerebroplacental ratio important when monitoring fetal wellbeing?**

Ina Popescu, C.A. Ionescu, M.Dimitriu, M.Banacu

*Saint Pantelimon Emergency Hospital, Bucharest, Romania*

**Introduction.** The value of cerebroplacental ratio (CPR) in the prediction of fetal distress is a theme extensively researched nowadays. The degrees of fetal blood flow redistribution is quantifiable through the ratio between medium cerebral artery flow (pulsatility index or resistance index) and umbilical artery flow (pulsatility index or resistance index) also known as cerebroplacental ratio.

**Methods.** After researching the PubMed, Uptodate si Wiley databases and analyzing the relevant clinical studies and reviews we chose to take into consideration only the results of the clinical studies from 2014-2015. We conducted a retrospective cohort study over a period of 2 years (2014-2015) by enrolling cases from Saint Pantelimon Emergency Hospital.

**Discussions.** During the last 2 years 224 cases of decreased CPR have been diagnosed in our hospital. Among these, a number of 58 (25.89%) newborns were considered SGA or suffering from IUGR while 136 (60.71%) newborns were AGA. Outcomes concerning this group are as following: in 98 (43.75%) cases Apgar scores  $\leq 7$ ; 50 (22.32%) newborns needed prolonged treatment and were hospitalized for more than 15 days while 38 (16.96%) newborns needed special care and were admitted into NICU; 6 (2.67%) newborns died during hospitalization.

**Conclusions.** Even though there are extensive studies on the matter of the CPR value as an indicator of fetal and neonatal prognostic, result are yet controversial, suggesting the need for further, wider studies.



- 1** Hotel Castle Garden
- 2** The Guesthouse of the Hungarian Academy of Sciences
- 3** Hungarian Academy of Sciences – Buda Castle Congress Hall
- 4** Burg Hotel
- 5** Matthias Church

