Abstracts of the
3rd Czech and International Congress of Andrology


Chateau Štiřín
Congress of Andrology

www.andrologickykongres.cz
www.congressofandrology.eu

Andrological Section of the Czech Urological Society

www.andrologickasekce.cz
www.czechandrology.eu

European Andrology

www.europeanandrology.cz
www.europeanandrology.eu
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After one year in front of you turns up the second supplement to the issue of the European Andrology. The supplement introduces to you abstracts of the 3rd Czech and International Congress of Andrology which is held in Chateau Štiřín in June 13–15, 2008. The congress has a standard structure, i.e. abstracts concerning male infertility, sexual dysfunction, assisted reproduction, quality in reproductive medicine, endocrinology, androoncology and surgical techniques in andrology. We are glad that among them you can find again abstracts from Prof. Nieschlag or our colleagues Dr. Paduch from Cornell University and Dr. Lucak from Columbia University.

I am very proud to announce you that for the first time 15 selected abstracts from the Congress will be also submitted and consequently published at PubMed in partnership with Biomedcentral. In my opinion this opportunity is honestly a historical milestone in Czech andrology and promising onset to the future. I believe we are on the right way in integrating to the European and international community of andrologists.

Despite our sincere effort and promises to launch electronic version of the European Andrology our intention was not fulfilled. Nevertheless, currently we are working on graphical image and structure of the journal. We strongly believe it will be fully initiated shortly after the congress. Concurrently is being formed the editorial board, were have addressed the selected Czech and worldwide andrologists to take participation in.

At least but not the last point to coming up, is the next Czech and International Congress of Andrology in 2009. We have taken a decision making a break next year to give a pause for thought and take a fresh breath. However, the Czech andrology will be presented in the 9th International Congress of Andrology which will be held in March 7–10, 2009 in Barcelona.

Jiri Heracek
Working session of the Andrological Section of the Czech Urological Society

October 26-30, 2008

Meeting with Czech compatriots in the Bohemian National Hall

Visit to the Cornell University and Columbia University with scientific programme

Visit to the Czech Center New York
The Organizers of the 3rd Czech and International Congress of Andrology gratefully acknowledge the support of the following companies:

**Abbott Laboratories**

**Andrologická sekce České urologické společnosti**

**Androgeos**

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The Chateau Štiřín
Dear Colleagues, Dear Friends,

This is already the third time we are addressing you with the invitation to the 3rd International Congress of Andrology, which will be held at the Štiřín Castle on June 13–15, 2008.

The course of the past Congresses was very profitable and encouraging for our organizational team because of the active participation of highly renowned specialists in the fields of urology, andrology, genetics, and reproductive medicine on the one hand and the positive response of the conference participants on the other. Our vision of worthy integration of the Czech andrology into the European professional community is fulfilling itself at several levels. The previous meetings made it possible to create personal contacts with top specialists in the field; the outdoor meeting of the Andrology Section of the Czech Society of Urology witnessed the first professional meeting of our urologists with representatives of two New York Universities; our physicians are being invited to collaborate by their colleagues from abroad.

This year's Štiřín congress should bring about further qualitative progress thanks to the thorough selection of topics and lecturers. We believe to be able to fulfill the expectations of the congress participants concerning the professional level of the event. Potential personal contacts with renowned specialists in beautiful surroundings and high-quality cultural program should make it an outstanding social event.

We are looking forward to the contributions of active participants and we cordially invite all those interested in the topics of such interesting fields as urology, andrology, and genetics.

Vladimír Sobotka
President of Congress
9th International Congress of Andrology
7-10 March 2009

XIV Congreso Nacional de la Asociación Española de Andrología
XI Encuentro Ibérico de Andrología
IV Encuentro Iberoamericano de Andrología
10-11 marzo 2009

Barcelona, Spain
The 3rd Faculty of Medicine, Charles University in Prague, in collaboration with private urological and andrological centre Androgeos, Sanatorium Pronatal, University Hospital Královské Vinohrady and Department of Urology of the Masaryk University and University Hospital Brno holds in the Chateau Štiřín in June 13–15, 2008

3rd Czech and International Congress of Andrology

Patronage

Tomáš Hanuš
President of the Czech Urological Society

Václav Pačes
Chairman of the Academy of Science of the Czech Republic

Bohuslav Svoboda
Dean of the 3rd Faculty of Medicine, Charles University in Prague

Jan Žaloudík
Dean of the Faculty of Medicine, Masaryk University Brno

Congress President

Vladimír Sobotka

Congress Secretary

Jiří Heráček

Organizational Committee

Jiří Heráček, Vladimír Sobotka, Michael Urban
Scientific Committee

Dalibor Pacík (chairman)
*Faculty of Medicine, Masaryk University, Brno*

Petr Weiss, Libor Zámečník
*1st Faculty of Medicine, Charles University in Prague*

Marta Šnajderová
*2nd Faculty of Medicine, Charles University in Prague*

Jiří Heráček, Michael Urban
*3rd Faculty of Medicine, Charles University in Prague*

Richard Fiala
*Faculty of Medicine, Charles University, Hradec Králové*

Jana Pěknicová
*Academy of Science, Prague*

Marcela Kosařová, Tonko Mardešić, Vladimír Sobotka
*Sanatorium Pronatal, Prague*

Vladimír Gregor, Roman Zachoval
*Thomayer University Hospital, Prague*

Aleš Horák
*University Hospital, Ostrava*

Jiří Kočárek
*Military Hospital, Prague*

Jiří Rubeš
*Veterinary Research Institute, Brno*

Luboslav Stárka
*Institute of Endocrinology, Prague*

Invited Speakers

Luca Gianaroli, Bologna, Italy
Herfried Kohl, Nuremberg, Germany
Volkmar Lent, Andernach, Germany
Susan Lucak, New York, USA
Jozef Marenčák, Skalica, Slovakia
Eberhard Nieschlag, Münster, Germany
Darius A. Paduch, New York, USA
General Information

Accessibility
By car:
Štiřín Conference Centre and hotel Chateau Štiřín is 25 km southeast from the Capital. On the highway D1 from Prague to Brno turn towards Velké Popovice (Exit 15-Všeuchomy), Štiřín is about 3 km passed Velké Popovice. It is also possible to turn from the Old Benešov road (rd. 603) in Želivec and than continue for 1 km further to Štiřín.

By bus:
From Prague metro station Budějovická take bus No. 334, 335, 337, 339, 369 to Želivec and from Želivec change to bus No. 461 to Kamenice – Strančice.

By train:
Take train No. 221 from Hlavní nádraží or Hostivař train stations to Strančice. Change to bus No 461.

The distance from the Prague – Ruzyně Internation Airport is 38 km/40 min., from Prague centre 25 km/25 min. and from Strančice train station 12 km/15 minut.

Address:
Chateau Štiřín
Ringhofferova 711
Štiřín
251 68 Kamenice

Accommodation
The accommodation of participants is ensured in hotel Chateau Štiřín**** and new hotel Baron ajacent hotel Chateau Štiřín and in hotel S.E.N.****, which is located about 10 km from hotel Chateau Štiřín. The accommodation will be ensured by Congress organizer.

Car Parking
Car Parking is available at the Chateau Štiřín parking.

Cellular Phones
Participants are kindly requested to keep their mobile phones switched off during all sessions.

Certificate of Attendance
A Certificate of Attendance is available at registration desk.
Congress Badge
Each participant and accompanying person receives at registration desk a name badge. All participants are strongly requested to wear their name badge at all times during the congress. The badge is the pass for the congress scientific and social programmes.

Congress Hour
Friday June 13, 2008 12 am – 7 pm
Saturday June 14, 2008 8 am – 7 pm
Sunday June 15, 2008 8 am – 12 am

CME Accreditation
Congress Guarantee is the Andrological Section of the Czech Urological Society, patronage is taken by the Czech Urological Society of the Czech Medical Association of JEP.
Congress is accredited by the Czech Medical Chamber. Each active participant obtains a Certificate.
Congress is accredited by the Czech Nurse Association. Each nurse obtains a certificate granting 9 credits for passive and 15 credits for active participation in a national system of the Continual Medical Education.

Currency, Banking, Credit Cards
The national currency unit in the Czech Republic is Czech crown (Kč). The main International credit cards are widely accepted for payment in most hotels, restaurants and shops. Exchange Offices and ATM machines are available. Hotel Štiřín accepts Visa, Visa Elektron, American Express, Mastercard, Maestro and Diner Club cards.

Electricity
The electricity in the Czech Republic runs on 220 volts and the frequency is 50 Hz, sockets have the European standard and plugs are three-prong grounded.

Exhibition
An Exhibition is opened alongside with the Congress in the Štiřín Congress Centre.

Insurance
The Congress Organizers are not taking responsibility for neither loss or damage of personal belongings, financial loss nor injury, illness and death of participants of the Congress. Participants are advised to arrange adequate cover for travel and health insurance before departing.

Internet Access
Hotel Štiřín offers in each room an internet access via LAN, at lounges and restaurants via WiFi (available at reception) – connection speed 256 kbps.

Management and Technical Support
Jiří Heráček, Androgeos, Na Valech 4/289, Prague 6, 160 00, Czech Republic, phone +420 233 325 636, fax +420 233 325 641, email: info@andrologickykongres.cz
Official Languages
Official languages of the Congress are Czech, Slovak, English (interpretation).

Participants Registration
Friday June 13, 2008 10 am – 6 pm  
Saturday June 14, 2008 8 am – 6 pm  

Registrated participant obtains Congress materials and name badge at registration desk.

Registration Fee
Doctors, accompanying person  3000 CZK  
Nurses  1000 CZK  

The registration fee includes:
admission to the lecture halls and participation in the scientific programme  
admission to the exhibition areas  
participation in the opening ceremony on June 13, 2008  
participation in the social party on June 14, 2008  
congress materials  
morning and afternoon coffee breaks on June 13–15, 2008  
lunch June 14, 2008

Social programme
Friday June 13, 2008  Opening ceremony, classical concert  
Saturday June 14, 2008  Social evening, concert, disco
Map
## Program Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>8.30-9.00</td>
<td>Andrology in the Czech Republic: Current Status and Future</td>
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<td>9.00-11.00</td>
<td>Sexual Dysfunction</td>
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<td>9.30-10.00</td>
<td>Coffee Break</td>
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<tr>
<td>10.00-11.00</td>
<td>Lectures of Invited Speakers</td>
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<td>11.00-12.00</td>
<td>Lunch</td>
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<td>12.00-13.00</td>
<td>Assisted Reproduction</td>
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<td>13.00-14.00</td>
<td>Surgical Methods in Andrology</td>
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<tr>
<td>14.00-15.00</td>
<td>Quality in Reproductive Medicine</td>
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<td>15.00-15.30</td>
<td>Coffee Break</td>
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<tr>
<td>15.30-15.45</td>
<td>Symposium Eli Lilly</td>
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<td>16.00-16.15</td>
<td>Endocrinology</td>
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<tr>
<td>16.30-17.00</td>
<td>Social Party, Concert - Petr Vondráček, Ekooneton</td>
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<tr>
<td>17.00-18.00</td>
<td>Dinner</td>
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<td>19.30-23.00</td>
<td>Social Party</td>
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<tr>
<td>20.00-20.30</td>
<td>Concert - Nostitz Quartet</td>
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**13.6.2008**
- **Registration Desk**
- **Suk’s Parlour**
- **Hunter’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**14.6.2008**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Restaurant Ales**
- **Restaurant Ales**

**15.6.2008**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Restaurant Ales**

**16.6.2008**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Restaurant Ales**

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**13.6.2008**
- **Registration**
- **Meeting of Andrological Section of CUS**
- **Welcome Drinks**
- **Coffee Break**
- **Varia**
- **Sperm**
- **Coffee Break**
- **Prostate Cancer**
- **Restaurants Atis**

**14.6.2008**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**

**15.6.2008**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**

**16.6.2008**
- **Suk’s Parlour**

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**13.00-13.30**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**14.00-15.00**
- **Coffee Break**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**15.00-16.00**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**16.00-16.15**
- **Coffee Break**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**17.00-18.00**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**18.00-19.30**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**19.30-20.30**
- **Coffee Break**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**20.30-21.30**
- **Coffee Break**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**21.30-22.30**
- **Coffee Break**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

**22.30-02.00**
- **Coffee Break**
- **Lunch**
- **Suk’s Parlour**
- **Restaurant Ales**
- **Salm’s Hall**
- **Suk’s Parlour**
- **Restaurant Ales**

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**13.6.2008**
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**16.6.2008**
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**13.00-13.30**
- **Lunch**
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**14.00-15.00**
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**18.00-19.30**
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- **Lunch**
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- **Restaurant Ales**
FRIDAY June 13, 2008

from 10.00 REGISTRATION

SUK’s Parlour

12.00 – 13.00 MEETING OF ANDROLOGICAL SECTION OF THE CZECH UROLOGICAL SOCIETY

HUNTER’s Parlour

13.00 WELCOME DRINK

13.45 – 14.00 Coffee break

SALM’s Hall

14.00 – 15.00 I. VARIA (SPONSORED BY NIKON)
Chairpersons: Zachoval R., Horak A.

I/1 Nikon Biostation – All in One Solution for the Live Cells Imaging
Rozkosny I.
Nikon, Prague, Czech Republic

I/2 Regional center for support of education and research in medical, imaging and clinical data
Hackajlo D., Klemenc V., Zachoval R., Klecanova M., Filip K.
Thomayer Teaching Hospital Prague, Czech Republic

I/3 Legal consequences of male vasectomy in the Czech Republic
Zamecnik L., Roubickova J.
Department of Urology, 1st Medical School, Charles University, Prague, Czech Republic

15.00 – 16.00 II. SEXUAL DYSFUNCTION
Chairpersons: Weiss P., Sramkova T.

II/1 Sexual dysfunctions in the Czech Republic: Results of the national survey
Weiss P.
Institute of Sexology, Charles University, Prague, Czech Republic

II/2 Sexuality of oncology patients
Sramkova T.
Traumatological Hospital of Brno, Trauma centre, Department of Traumatology, Faculty of Medicine, Masaryk University Brno, Czech Republic
Department of Psychology, Faculty of Medicine, Masaryk University Brno, Czech Republic

II/3 Coloproctological diseases as a cause of sexual dysfunction in men
Sutory M.1, Sramkova T.1,2
II/4 The role of chronic prostatitis/chronic pelvic pain syndrome in men with sexual dysfunction
Maskova V.1, Urban M.1,2, Heracek J.1,2
1Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
2Androgeos, Prague, Czech Republic

II/5 Automutilation of the male external genitalia
Zamecnik L., Macek P., Roubickova J., Pavlik I.
Department of Urology, 1st Medical School, Charles University, Prague, Czech Republic

16.00 – 16.15 Coffee break

16.15 – 17.00 III. PROSTATE CANCER (SPONSORED BY ASTRA ZENECA)
Chairpersons: Pacik D., Heracek J.

III/1 New treatment options of hormone-refractory prostate cancer
Heracek J., Urban M.
Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
Androgeos, Prague, Czech Republic

III/2 Chemoprevention of prostate carcinoma
Vidlar A., Student V., Hrabec M., Vrtal R.
Department of Urology, University Hospital Olomouc, Czech Republic

III/3 Importance of fPSA/tPSA ratio for diagnostic of prostate cancer
Rosinska V., Student V., Vidlar A., Hrabec M.
Department of Urology, Teaching Hospital Olomouc, Czech Republic

17.00 – 18.00 IV. SPERM (SPONSORED BY ABBOTT)
Chairpersons: Sobotka V., Rubes J.

IV/1 The impact of air pollution on the quality of human sperm
Rubes J.1, Rybar R.1, Veznik Z.1, Sram R.2
1Veterinary Research Institute, Brno, Czech Republic
2Institute of Experimental Medicine, Academy of Science, Prague, Czech Republic

IV/2 Gamete and embryo donation program in assisted reproduction
Ventruta P.1, Zakova J.1, Pacik D.2, Crha I.1, Lousova E.1, Huser M.1
1Department of Gynecology and Obstetrics, Masaryk University and Faculty Hospital, Brno, Czech Republic
2Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

IV/3 Sperm surface proteins: Their origin, biochemical properties and role in reproduction
Jonakova V.1, Manaskova P.1, Ticha M.2, Peknicova J.1
1Laboratory of Diagnostics for Reproductive Medicine, Institute of Biotechnology, Academy of Sciences of the Czech Republic, v. v. i., Prague, Czech Republic
2Department of Biochemistry, Faculty of Science, Charles University, Prague, Czech Republic
**IV/4**  
Sobotka V. 1,2, Heracek J. 2,3, Kosarova M. 1, Hlinka D. 1, Mardesic T. 1  
1Sanatorium Pronatal, Prague, Czech Republic  
2Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic, 3Androgeos, Prague, Czech Republic

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**SUK’s Parlour**

19.30  
CONCERT – NOSTITZ QUARTET

Restaurant ATIS

20.30  
OPENING CEREMONY, SOCIAL PARTY

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**SALM’s Hall**

8.30 – 9.00  
**I. ANDROLOGY IN THE CZECH REPUBLIC**  
Chairpersons: Pacik D., Heracek J., Sobotka V.

9.00 – 9.45  
**II. SEXUAL DYSFUNCTION (SPONSORED BY PFIZER)**  
Chairpersons: Pacik D., Zamecnik L.

II/1  
Sexual dysfunction in men – update on pathophysiology, imaging, and management techniques of orgasmic and ejaculatory dysfunction  
Paduch D.A. 1, Bolyakov A. 1, Pacik D. 2, Kiper J. 1  
1Department of Urology, Weill Cornell Medical College, Cornell University, New York, USA  
2Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

II/2  
Viagra – 10 years – 10 reasons for confidence in it  
Zamecnik L.  
Department of Urology, 1st Medical School, Charles University, Prague, Czech Republic

II/3  
The role of hyaluronic acid in PBS/IC treatment – and its benefits for the sexual function  
Bartl I., Misanko V., Setina R., Cano M.  
Department of Urology, FnsP Bratislava, Ruzinov Branch, Slovak Republic

9.45 – 10.00  
Coffee break

10.00 – 11.00  
**III. LECTURES OF INVITED SPEAKERS**  
Chairpersons: Pacik D., Heracek J.

III/1  
Testosterone deficiency syndrome and ageing male  
Marencak J.  
Department of Urology, Hospital with Polyclinic Skalica, Slovak Republic
III/2  Andrology in 21st century – making positive impact on men’s health
Paduch D.A., Bolyakov A., Pacik D., Kiper J.
1Department of Urology, Weill Cornell Medical College, Cornell University, New York, USA
2Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

III/3  Klinefelter syndrome: underdiagnosed and undertreated
Nieschlag E.
Institute of Reproductive Medicine of the University, WHO Collaboration Centre for Research in Male Reproduction, Münster, Germany

11.00 – 12.00  IV. LECTURES OF INVITED SPEAKERS
Chairpersons: Sobotka V., Rubes J.

IV/1  Prostate cancer in men with PSA – values < 4 ng/ml
Lent V.
Department of Urology, Stiftshospital, Andernach, Germany

IV/2  Brain-body interactions: Functional somatic syndromes
Lucak S.
Department of Digestive and Liver Disease, Columbia University Medical Center, New York, USA

IV/3  Sperm aneuploidy and embryo quality
Gianaroli L., Magli M.C., Ferraretti A.P., Crippa A., Pescatori E.S.
S.I.S.M.E.R. Reproductive Medicine Unit, Bologna, Italy

12.00 – 13.00  Lunch

13.00 – 14.00  V. ASSISTED REPRODUCTION (SPONSORED BY MERCK)
Chairpersons: Mardesic T., Travnik P.

V/1  Increasing paternal age and fertility
Mardesic T., Sobotka V.
Sanatorium Pronatal, Prague, Czech Republic

V/2  Do chlamydia, mycoplasma and ureaplasma contaminations affect sperm quality?
Veznik Z., Zajicova A., Svecova D., Kunetkova M., Prinosilova P.
Veterinary Research Institute, Department of Genetics and Reproduction, Brno, Czech Republic

V/3  Interpretation of 4000 performed sperm assays, comparison with assisted reproduction results
Travnik P., Vesela K., Oracova E., Tauwinklova G., Vesely J., Hromadova L.
REPROMEDA, Brno, Czech Republic

14.00 – 15.00  VI. SURGICAL METHODS IN ANDROLOGY (SPONSORED BY ANDROGEOS)
Chairpersons: Urban M., Kocarek J.

VI/1  Robotic assisted laparoscopic radical prostatectomy (da Vinci prostatectomy – dVP): Experience and first results after 200 cases
Kocarek J., Kohler O., Kaplan O., Belej K., Pokorny J.
Department of Urology, Central Military Hospital, Prague, Czech Republic
VI/2 Surgical techniques used in treatment of morbus Peyroni disease
Hrabec M., Hartmann I., Vidlar A., Student V.
Department of Urology, Teaching Hospital Olomouc, Czech Republic

VI/3 ARGUS – a new surgical method in the treatment of male urinary incontinence
Urban M.1,2, Heracek J.1,2, Novotny T.1, Hrbaček J.1, Palascak P.3
1Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University in Prague, Czech Republic
2Androgeos, Prague, Czech Republic
3Centre Hospitalier General Paul Morel, Vesoul, France

VI/4 Management of post-prostatectomy urinary incontinence
Hanus T.
Department of Urology, General Teaching Hospital, Charles University, 1st Medical Faculty, Institute for Postgraduate Education of Physicians and Pharmaceuts, Prague, Czech Republic

15.00 – 15.30 VII. QUALITY IN REPRODUCTIVE MEDICINE (SPONSORED BY PRONATAL)
Chairpersons: Sobotka V., Kohl H.

VII/1 The role of risk management in the quality of healthcare
Sobotka V., Mardesic T., Kosarova M., Weber V., Hlinka D.
Sanatorium Pronatal, Prague, Czech Republic

VII/2 Quality management and trends for certification schemes in European healthcare institutions
Kohl H.
LGA InterCert in Nurnberg and TUV Rheinland Cert, Koln, Germany

15.30 – 15.45 Coffee break

15.45 – 16.30 VIII. SYMPOSIUM ELI LILLY – NEW HORIZON IN ERECTILE DYSFUNCTION TREATMENT (SPONSORED BY ELI LILLY)
Chairpersons: Pacik D., Heracek J.

VIII/1 Does the current erectile dysfunction therapy meet all expectations of partners?
Heracek J.
Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University in Prague, Czech Republic
Androgeos, Prague, Czech Republic

VIII/2 The new possibility in treatment of erectile dysfunction: Daily dosing Cialis 5 mg
Pacik D.
Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

16.30 – 17.30 IX. ENDOCRINOLOGY
Chairpersons: Starka L., Snajderova M.

IX/1 Progress in andrological endocrinology
Starka L.
Institute of Endocrinology, Prague, Czech Republic
IX/2 Cryptorchidism in childhood and treatment strategy: Hormonal therapy or surgery?
Snajderova M.
Department of Paediatrics, Charles University, 2nd Medical School and University Hospital Motol, Prague, Czech Republic

IX/3 Clinical practice options for late-onset hypogonadism syndrome (LOH)
Cermak A., Pacik D.
Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

IX/4 Influence of the 5α-reductase inhibitor type 2 on circulating neuroactive steroids
Duskova M.1, Hill M.1, Hanus M.2, Matouskova M.2, Starka L.1
1Institute of Endocrinology, Prague, Czech Republic
2Urocentrum, Prague, Czech Republic

IX/5 Occurrence of erectile dysfunction (ED), testosterone deficiency syndrome (TDS), and metabolic syndrome (MS) in patients with BMI > 30, or abdominal obesity
Fillo J.1, Breza J.1, Fillova M.2, Vachulova A.2, Dukat A.2, Krahulec B.2
1Comenius University, Urology, Bratislava, Slovak Republic
2Comenius University, General Medicine, Bratislava, Slovak Republic

SUK’s Parlour

8.30 – 15.00 SECTION OF NURSES

Restaurant ATIS

19.30 SOCIAL EVENING
CONCERT – PETR VONDRAČEK & LOKOMOTIVA DISCO

Sunday June 15, 2008

SALM’s Hall

8.30 – 9.00 1. MALE INFERTILITY
Chairpersons: Sobotka V., Peknicova J.

I/1 Fertility in male patients with newly diagnosed Hodgkin’s lymphoma
Smardova L.1, Kral Z.1, Crha I.2, Vasova I.1, Vorlicek J.1
1Department of Internal Medicine and Hematooncology, University Hospital and Faculty of Medicine, Masaryk University, Brno, Czech Republic
2Department of Obstetrics and Gynecology, University Hospital and Faculty of Medicine, Masaryk University, Brno, Czech Republic

I/2 The effect of the nutritional supplements on sperm quality
Konyckova I., Ilkova G., Harbulak P.
GYN-FIV, Centre of Gynecology and Reproductive Medicine, Bratislava, Slovak Republic
I/3 A new approach to assess oxidative stress in human semen
Fingerova H.1, Novotny J.2, Oborna I.1, Svbodova M.1, Brezinova J.1, Vyslouzilova J.1, Radova L.3
1Department of Obstetrics and Gynecology, Palacky University Medical School, Olomouc, Czech Republic
2Institute of Biology, Palacky University Medical School, Olomouc, Czech Republic
3Laboratory of Experimental Medicine, Palacky University Medical School, Olomouc, Czech Republic

9.00 – 10.00 II. SURGICAL METHODS IN ANDROLOGY
Chairpersons: Cermak A., Beharka R.

II/1 Microsurgical techniques in obstructed semen tract reconstruction
Beharka R., Pacik D.
Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

II/2 Twenty years of experience with percutaneous endovascular treatment of varicocele
Janik V.1, Labos M.1, Heracek J.2, Urban M.2, Padr R.3, Moravec J.3, Snajdauf J.3, Hanek P.4, Kawaciuk I.4
1Department of Radiology, 3rd Faculty of Medicine and Faculty Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
2Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
3Department of Surgery, 2nd Faculty of Medicine and Faculty Hospital Motol, Charles University, Prague, Czech Republic
4Department of Urology, 2nd Faculty of Medicine and Faculty Hospital Motol, Charles University, Prague, Czech Republic

II/3 Current therapeutic options for the management of Peyronie’s disease
Cermak A., Pacik D.
Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

II/4 Microsurgical varicocelectomy
Beharka R., Pacik D., Khamzin A., Nussir M.
Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

II/5 Early surgical correction of extensive penile trauma
Vrtal R., Kral M., Hrabec M., Student V.
Department of Urology, University of Palacky and Teaching Hospital Olomouc, Czech Republic

10.00 – 10.15 Coffee break

10.15 – 11.15 III. MALE INFERTILITY
Chairpersons: Peknicova J., Kosarova M.

III/1 The effect of low dose of vinclozolin on reproductive tract development in CD1 outbred mice
Peknicova J.1, Elzeinova F.1, Novakova V.1, Buckiova D.2, Kubatova A.1
1Laboratory of Diagnostics for Reproductive Medicine, Institute of Biotechnology, Academy of Sciences of the Czech Republic v. v. i., Prague, Czech Republic
2Department of Auditory Neuroscience, Institute of Experimental Medicine, Academy of Sciences of the Czech Republic, v. v. i., Prague, Czech Republic

III/2 Y-chromosome microdeletions: a controversial indication for preimplantation sex selection in pairs with andrological factor of infertility
Kosarova M., Siruckova K., Maskova S., Hlinka D., Weber V., Gregor V., Sobotka V.
Sanatorium Pronatal, Prague, Czech Republic
III/3  
**AZFc region partial deletions on the Y chromosome in Czech fertile men**
Norambuena P.1, Stambergova A.1, Piskackova T.1, Balascakova M.1, Koudova M.1, Gromoll J.2, Macek M. sr.1  
1Department of Biology and Medical Genetics, Charles University, 2nd Medical School and University Hospital Motol, Prague, Czech Republic.  
2Institute of Reproductive Medicine, University of Münster, Münster, Germany  

III/4  
**N680S and -29 (A/A, A/G, G/G) FSH-R polymorphisms in Czech fertile males**
Macek M. sr.1, Kluckova H.1, Norambuena P.1, Piskackova T.1, Balascakova M.1, Koudova M.1, Stambergova A.1, Macek M. jr.1, Gromoll J.2  
1Department of Biology and Medical Genetics, 2nd Medical School of Charles University and University Hospital Motol, Prague, Czech Republic  
2Institute of Reproductive Medicine, University of Münster, Münster, Germany  

11.15 – 12.00  
**IV. TAKE HOME MESSAGE**  
Chairpersons: Pacik D., Heracek J., Sobotka V.  

**THE BEST PRESENTATION ANNOUNCEMENT**  

**CONGRESS CLOSING**
NIKON BIOSTATION – ALL IN ONE SOLUTION FOR THE LIVE CELLS IMAGING

Rozkosny I.

Nikon, Prague, Czech Republic

The newly designed concept of the Nikon Biostation enabled All in One Solution for the Live Cells Imaging. The device incorporates the microscopical module including fluorescence, camera, incubator with CO₂, temperature and humidity regulation. The whole system is controlled via external computer. Biostation is produced in two versions - IM for one Petri Dish and CT for more Petri Dishes, Flasks or well plates. The first Biostation IM in the Czech Republic has been installed at the Medical Faculty of Charles University in Hradec Kralove in 2007.

Author email: rozkosny@nikon.cz

REGIONAL CENTER FOR SUPPORT OF EDUCATION AND RESEARCH IN MEDICAL, IMAGING AND CLINICAL DATA

Hackajlo D., Klemenc V., Zachoval R., Klecanova M., Filip K.

Thomayer Teaching Hospital, Prague, Czech Republic

Aim of the project is to create a database of medical, imaging and clinical data in important medical specialities and make it accessible for broad spectrum of medical professionals. Medical evidence of medical, imaging and clinical data from Thomayer Teaching Hospital has been reviewed with the aim of creating a database of diseases and syndroms in the field of oncology, pneumology, traumatology, urology, abdominal surgery, thoracic surgery and gynaecology. Database of 700 case studies has been created with 100 case studies in each of seven medical specialities. In each specialty a trunk of basic diagnosis has been formed and 3 typical and other atypical case studies have been assigned to each diagnosis with emphasis on imaging data. Original website has been created where all data are present and accessible for a registered client. Large database of medical data is now accessible for medical professionals and serves as educational and potential e-learning program.

Project was supported by European social foundation and state budget of the Czech Republic.

Author email: roman.zachoval@ftn.cz

LEGAL CONSEQUENCES OF MALE VASECTOMY IN THE CZECH REPUBLIC

Zamecnik L., Roubickova J.

Department of Urology, 1st Medical School, Charles University, Prague, Czech Republic

Authors present legal consequences of vasectomy in the Czech Republic – this procedure is regulated by Directive of Ministry of Health of the Czech Republic.

Author email: libor.zamecnik@lf1.cuni.cz
SEXUAL DYSFUNCTIONS IN THE CZECH REPUBLIC: RESULTS OF THE NATIONAL SURVEY

Weiss P.

Institute of Sexology, Charles University, Prague, Czech Republic

Introduction:
To estimate the prevalence of sexual dysfunctions in the Czech men and women.

Material and methods:

Results:
16% men and 15% women admitted any sexual dysfunction during the lifetime, 15% men and 11% of women in the time of survey. The most common dysfunctions in men are rapid ejaculation and erectile dysfunction (48%, resp. 41% of those, who admitted any) and lack of sexual arousal (lack of lubrication) and dyspareunia in women (56% and 47%). Only 32% of Czech women never pretend orgasm (80% of men), 16% of them (and 12% of men) pretend orgasm frequently. The prevalence of sexual dysfunctions according to age are stable in women (currently 11% in all age categories), in men are increasing (8% in youngest men and 35% in men older than 60 years). The most rapid increase is visible in erectile dysfunctions. Only 14% of dysfunctional men and 10% of dysfunctional women were treated, mostly succesfully.

Conclusions:
The most common dysfunctions in men are rapid ejaculation and erectile problems, in women problems with sexual arousal. Male sexual dysfunctions are increasing with age (especially the erectile problems), the prevalence of female ones is stable during the lifetime (about 11% independently on age).

Author email: petr.weiss@vfn.cz

SEXUALITY OF ONCOLOGY PATIENTS

Sramkova T.

Traumatological Hospital of Brno, Trauma centre, Department of Traumatology, Faculty of Medicine, Masaryk University Brno, Czech Republic
Department of Psychology, Faculty of Medicine, Masaryk University Brno, Czech Republic

In our country, cancer is the second most frequent cause of death. Cancer remains a major public health problem. Oncological illness changes the quality of life, system of values and mental state. It influences the length of life, social contacts and economic status. Sexual well-being may be altered by both the diagnosis and treatment of cancer. But sexual dysfunction is often unrecognized, underestimated and untreated. Factors negatively influencing sexuality of the oncologically ill are: fatigue, physical disability and physical limitations, depression, fear, grief, pain, social isolation, insufficient communication with attending staff, faltering partner communication, change in appearance conducive to loss of self-confidence and attractiveness, loss of gender role and feelings of shame. Biological factors such as anatomic alterations (breast amputation, penis amputation, rectum amputation), physiological changes (hormonal status) and secondary effects of medical interventions may preclude normal sexual life. Side effects of pharmacological treatment such as nausea, vomiting, hair loss and fatigue can result in adverse effects on sexuality. Disfiguring surgery has the same effect. Adjuvant therapy as radiotherapy, cytotoxic and hormonal therapy also have adverse effects on sexual life of oncological patients. Moreover, oncological patients feel that their significant others as well as medical staff consider them asexual. During oncological treatment, majority of patients did not receive any counseling from the oncology staff regarding changes in their sexuality and their relationships. A great number of oncological patients describes a deterioration in their partner relationships and report a decrease in sexual life. The author presents a summary of different types of tumors and their influence on sexual life. She concludes that care of sexuality of oncological patients is essential for the quality of life and it should be interdisciplinary.

Author email: t.sramkova@unbr.cz
Stool excretion, along with urine excretion, food intake, reproduction and breathing, belongs to the basic life functions of man. Its disruption dramatically influences the quality of life. Many coloproctological illnesses lead not only to malfunction of stool excretion, but they can also have adverse effects on sexual functions and, as a result, worsen the patient’s quality of life. The authors present a summary of sexual dysfunctions, their mechanisms of origin and treatment options in different coloproctological illnesses. They devote their attention to both organic (result of anatomical damage to neural supply) and functional disorders of the pelvic floor, to infections and, finally, to the influence of introducing stoma on the sexual function in men.

Author email: m.sutory@volny.cz

THE ROLE OF CHRONIC PROSTATITIS/CHRONIC PELVIC PAIN SYNDROME IN MEN WITH SEXUAL DYSFUNCTION

Maskova V.1, Urban M.1,2, HeracekJ.1,2

1Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
2Androgeos, Prague, Czech Republic

Introduction:
Chronic pelvic pain in men is associated with significant sexual dysfunction.

Material and methods:
Prospective study of 36 patients who underwent our given protocol comprising medical history, laboratory and physical examination. National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI) were used to document the severity/frequency of pain, urinary and sexual symptoms. Subjective symptoms were scored by general assessment questions included loss of libido, quality of erection and pain on ejaculation too.

Results:
36 patients with CP/CPPS 30 (83.3%) reported sexual dysfunction. NIH-CPSI total score with sexual dysfunction was (16-41) compared with (11-22) for patients without sexual dysfunction. At baseline 30 men with sexual dysfunction including only erectile dysfunction in 9 (30%), only ejaculatory difficulties in 9 (30%), both difficulties in 12 (40%), decreased libido in 24 (80%) and ejaculatory pain in 21 (70%). Patients reporting both erectile dysfunction and ejaculatory difficulty reported worse CP/CPPS symptoms than patients without such complaints. The presence of erectile and ejaculation dysfunction was related to significantly higher scores for domains of pain and quality of life. Sexual dysfunction merits consideration as an important aspect of CP/CPPS and potential outcome measure.

Author email: maskova@fnkv.cz
AUTOMUTILATION OF THE MALE EXTERNAL GENITALIA

Zamecnik L., Macek P., Roubickova J., Pavlik I.

Department of Urology, 1st Medical School, Charles University, Prague, Czech Republic

Introduction:
Authors present 3 cases of self-injection of foreign material under penile skin with the aim to increasing the diameter of penis.

Materials and methods:
Patient 1, age 35. Three weeks before presentation he self-injected a paraffin under the skin of the whole penis from several punctures. He presented due to difficult voiding, swelling and mauve colour of a foreskin, pain and fever up to 38 degrees. Ultrasonography showed no obvious fluid collection, thickened subcutaneous tissues only, erectile bodies intact. Patient was admitted, broad spectrum ATB administered and suprapubic tube inserted. As no clear improvement was noted within 24 hours complete circumcision was performed. Patient went well post-operatively, voided spontaneously. Histology showed acute tissue inflammatory reaction.

Patient 2, age 25. He self-injected warmed Framykoin® ointment under the penile skin in 2002 without acute complications. He was complication free in 2006, but requested a removal of a subcutaneous granuloma due to unattractive appearance. Twofold surgical removal was carried out using a degloving technique and uncomplicated post-operative course.

Patient 3, age 42. After change of spouse he self-injected liquid paraffin under the skin of the whole penis. Total amount was unknown. He was complication free but surgical removal of giant paraffinomas was on patient’s request. He was not satisfied with the colour and size effect of this application.

Results:
All of patients required surgical management following a self-injection of a foreign material under penile skin due to a complication or patient’s request. Postoperative course was uncomplicated in all cases.

Conclusions:
Self-injection of foreign material under the penile skin is usually followed by complications arising from a tissue inflammatory reaction or a granulomatous reaction to foreign material. These complications often lead to immediate or delayed surgical intervention.

Author email: libor.zamecnik@lf1.cuni.cz

NEW TREATMENT OPTIONS OF HORMONE-REFRACTORY PROSTATE CANCER

Heracek J., Urban M.

Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic

Androgeos, Prague, Czech Republic

Prostate cancer is now the most common non-cutaneous cancer in the Western world. Hormone refractory prostate cancer (HRPC) is defined as a continuous rise of PSA in serial measurements in the presence of adequate androgen deprivation and castrate levels of testosterone. Anticancer therapeutic regimens, including chemotherapy, radiation therapy, immunotherapy and gene therapy are possibilities of treatment. Chemotherapy can be integrated in the therapeutic management of HRPC after antiandrogens and other hormonal therapies have failed. We use estramustine-based chemotherapy, anthracyclines, suramin and oral chemotherapy (etoposide, cyclophosphamide, diethylbestrol and prednisone), as well drugs such as non-taxane tubuline inhibitors, calcitriol, antiendothelin, bevacuzimab, gefitinib, Bcl2 antisense, or vaccine (GVAX1). Many patients with hormone-refractory PCa have painful bone metastases and are not amenable to chemotherapy, making effective palliative treatment options (palliative external beam radiation, cortisone, analgesics and anti-emetics) necessary. Common complications due to skeletal metastases include bone pain, vertebral collapse or deformity pathological fractures, and spinal cord compression. The use of zoledronate has demonstrated a clinically significant effect in terms of prevention of skeletal complications and reduction of pain. A multidisciplinary approach is required together with an input from oncologists, radiation oncologists, urologists, nurses, and social workers.

Author email: heracek@fnkv.cz
Prostate cancer chemoprevention can be described as the administration of natural products and pharmaceutical agents that inhibit one or more steps in the natural history of prostatic carcinogenesis. In recent, prostate carcinoma is the most common cancer in European and American men. Prostate cancer is an excellent target for chemoprevention strategies; given its late age of onset, any delay in carcinogenesis would lead to a reduction in its incidence. In 2003, the Prostate Cancer Prevention Trial (PCPT) became the first phase III clinical trial of prostate cancer prevention. This landmark study was terminated early due to the 24.8% reduction of prostate cancer prevalence over a 7-year period in those men taking the 5α-reductase inhibitor, finasteride. The other ongoing phase III clinical trials of prostate cancer chemoprevention – the REDUCE study using dutasteride, and the SELECT study using vitamin E and selenium – are also reviewed. At present, finasteride remains the only intervention shown in long-term prospective phase III clinical trials to reduce the incidence of prostate cancer. Several epidemiologic and other studies have reported associations between fruit and vegetable intake (lycopene, phytoestrogens, polyphenols, flavonoids and flavonolignans) and reduced risk of prostate cancer, but the findings are inconsistent and data on clinically relevant advanced prostate cancer are limited. For future we need to verify these findings in large clinical trials.

Author email: alevi@centrum.cz

IMPORTANCE OF fPSA/tPSA RATIO FOR DIAGNOSTIC OF PROSTATE CANCER

Rosinska V., Student V., Vidlar A., Hrabec M.

Department of Urology, Teaching Hospital Olomouc, Czech Republic

Introduction:
Prostate cancer is the most common tumor in the male population in Western Europe and USA. In the Czech Republic incidence is 96.87/100 000 inhabitants (NOR 2005). Prostate cancer is third most frequent causation of death for malignant tumor (28.52/1000 inhabitants). The main diagnostic marker for evidence of prostate cancer is prostate-specific antigen (PSA). In the blood portion of PSA is bound with proteins and the rest is free (free PSA). PSA Author email: is organ-specific but not cancer-specific, and serum levels may be elevated in the presence of benign prostatic hyper trophy, prostatitis and other non-malignant conditions. Low specificity of PSA is the reason for developing of new practices. The aim was to find out efficiency of free to total PSA ratio (fPSA/tPSA) pro diagnostic of the prostate cancer.

Material and methods:
Since 6/2006 to 2/2008 we provided 543 prostate biopsies on Department of Urology, Teaching Hospital Olomouc. We evaluated 418 cases with free to total PSA ratio.

Results:
Prostate cancer was proved in 90 patients, the average fPSA/tPSA was 12.9%. In 328 biopsies with non-malignant conditions average fPSA/tPSA was 17.46%. In 209 patients with BPH was average fPSA/tPSA 18.25%, in 59 patients with inflammation was 15.216%. In 37 patients with prostatic dysplasia average fPSA/tPSA was 18.31%. These data were evaluated with Wilcoxon rank sum test. We find out significant differences between prostate cancer and all other conditions (p<0.0001). We did not prove significant differences between cancer grades (Gleason score).

Conclusions:
Usage of free to total PSA ratio in prostate cancer diagnostic can decrease number of unnecessary prostate biopsies and preserve high detection rate of prostate cancer.

Author email: alevi@centrum.cz
THE IMPACT OF AIR POLLUTION ON THE QUALITY OF HUMAN SPERM

Rubes J.1, Rybar R.1, Veznik Z.1, Sram R.2

1Veterinary Research Institute, Brno, Czech Republic
2Institute of Experimental Medicine, Academy of Science, Prague, Czech Republic

Introduction:
The capital city of Prague has become recently one of the regions in the Czech Republic with the highest level of air pollution from extensively growing transport, complicated by the geomorphology and architecture of the central city areas. Genotoxic and carcinogenic agents such as polycyclic aromatic hydrocarbons (PAH) are present among chemical compounds polluting the atmosphere. The concentrations of these compounds are significantly higher in winter than in the summer months.

Material and methods:
The impact of air pollution on the quality of sperm was studied in city policemen from Prague. The level of air pollution was assessed on the basis of information from two sources: data from stationary measuring stations AIM Prague and for 48 h using personal sampling devices (URG Corp, USA). The study was performed on 46 city policemen. They were examined in February and in May 2007. Standard analysis of ejaculates was conducted according to the WHO guidelines and chromatin integrity was measured by the SCSA method.

Results:
No significant differences in the investigated variables of standard analysis (volume of ejaculate, sperm count, motility and viability) were found between the groups of samples collected in February and May. However, the results obtained by evaluation of chromatin integrity of sperm from the city policemen who participated in the study were completely different. The damage, expressed in terms of the percentage of spermatozoa with detectable DNA fragmentation index (d-DFI), high chromatin damage (h-DFI) and percentage of immature cell forms (HDS), was significantly higher (P ≤ 0.001) in February.

Conclusion:
The results of the study suggest that exposure of air pollution may have adverse effects on male reproductive function. It follows from the present study that air pollution may be a factor sensitively reflected in particular by sperm chromatin integrity level, even though conventional parameters of ejaculates remain unchanged.

Author email: rubes@vri.cz

GAMETE AND EMBRYO DONATION PROGRAM IN ASSISTED REPRODUCTION

Ventruba P.1, Zakova J.1, Pacik D.2, Crha I.1, Lousova E.1, Huser M.1

1Department of Gynecology and Obstetrics, Masaryk University and Faculty Hospital, Brno, Czech Republic
2Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

Donation of sperm, oocytes or embryos becomes a novel alternative for infertile couples dependent before only on adoption or life without children. In Czech Republic gamete and embryo donation is not restricted by law and is defined as anonymous, voluntary and complimentary.

1. Sperm donation - first sperm banks were founded from 1960’s motivated by fact that some men can be cured from serious diseases only for the price of permanent infertility. From 1961 in Czech Republic the Sexology Institute in Prague started attempts with “boosted sperm” mixing the husband’s sperm with sperm of healthy donor. Sperm donor program in Brno university OB/GYN department was launched in 1995 and until now we have had 337 candidates for sperm donors, from which only 72 (21.4%) fulfilled the strict criteria (age, education, excellent sperm count, microbiology, serology and genetic testing) and became a sperm donors. During 13 years of running our sperm bank 4915 doses of sperm were cryopreserved, and 3958 doses was utilized for IUI or IVF/ICSI cycles.

2. Oocyte donation - first child after oocytes donation was born in 1983 in Australia. Our Centre started to implement this technique in 1997, and first healthy child was born in 1999. The oocytes donors recruit from healthy volunteers or infertile women with redundant oocytes. The selection criteria for donors are similar to sperm donation program. In 2006-2007 our infertility team performed 95 embryotransfers with donated oocytes and reached 32.7% clinical pregnancy rates (PR).

3. Embryo donation - from 1999 our clinic performs also embryo donation cycles. There are two origins of embryos for donation program – spare embryos of couples with fulfilled child wish and embryos created by fertilization of donated oocytes
with donor sperm. During 8 years of existence of embryo donation program we have reached 23.0% clinical pregnancy rates from cryopreserved embryotransfers, and 36.4% clinical pregnancy rates from fresh (non-cryopreserved) embryotransfers.

Conclusion: Gamete and embryo donation program has high social impact in humans. For the patient in highly demanded psychologically and also economically. On the other hand for infertile couples with the lack of their own gametes it represents the only solution to fulfill their child wish. Due to various religious and political regulation of human gamete donations in some European countries, the donor-ship programs in more liberal countries is becoming lucrative business and thus major ethical issue. Nowadays describing situation in Czech Republic we can speak about embryo and semen banking “industry”.

Author email: ventruba@fjbrno.cz

Seminal plasma is a mixture of secretory products of the male reproductive organs – epididymis, seminal vesicles (SV), prostate gland and bulbourethral glands. Seminal plasma proteins bind to the sperm surface at ejaculation and may modulate sperm properties during reproduction. Seminal plasma proteins (AQN, AWN and PSP spermadhesins, DQH sperm surface protein, proteinase inhibitors) are multifunctional proteins with the ability to also bind with various endogenous ligands present in the male and female reproductive tracts.

Protein structures, biochemical features and binding properties of these proteins have been already described in detail. Here we investigated origin of some of these proteins in the male reproductive organs. Porcine spermadhesins (AQN, AWN, PSP) are secreted mainly by the SV, but their mRNAs have been found also in the cauda epididymis and prostate. Using specific polyclonal antibodies, PSP-I and PSP-II proteins were immunodetected in tissue extracts from cauda epididymis, prostate, SV and Cowper’s glands on the blots, and in secretory tissues of cauda epididymis, prostate and SV by indirect immunofluorescence (IMF). Moreover, we localized PSP spermadhesins on epididymal and ejaculated spermatozoa. Simulated protein attachment at ejaculation was studied by the binding of biotin-labelled PSP proteins to epididymal spermatozoa. PSP proteins are produced not only by SV and prostate, but also by epididymis.

The mRNA transcript of DQH protein was found in SV, but not in the testis, epididymis and prostate. DQH sperm surface protein shows affinity to phosphorylcholine, acidic polysaccharides, oviductal epithelium and zona pellucida (ZP) glycoproteins. Monoclonal antibodies (MAbs) against DQH protein were prepared and used for determination of the DQH protein origin in boar reproductive organs, its localization on boar spermatozoa, and for investigation of its binding abilities in the porcine oviduct and to ZP of the oocyte. DQH was immunodetected by MAbs in SV extract and fluid, on SV tissue sections and on the membrane-associated acrosome part of ejaculated spermatozoa. These results confirmed the ability of DQH protein to bind to the sperm surface at ejaculation and to participate in the formation of the sperm reservoir in the porcine oviduct. Moreover, monoclonal antibodies reduced binding of sperm to oocytes and proved the role of DQH protein in the sperm-ZP primary binding.

Further characterization of seminal plasma protein forms expressed in the individual reproductive organs might help to understand their subsequent role in the reproduction process.

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Author email: vjon@img.cas.cz
MICROTESE WITH PGD – AN EFFECTIVE METHOD FOR TREATMENT OF NON-OBSTRUCTIVE AZOOSPERMIA. RESULTS OF 25 COUPLES IN THE PERIOD 2003-2007

Sobotka V. 1,2, Heracek J. 2,3, Kosarova M. 1, Hlinka D. 1, Mardesic T. 1

1Sanatorium Pronatal, Prague, Czech Republic
2Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
3Androgeos, Prague, Czech Republic

Material and methods:
During the period of January 2003 – May 2007, 223 microTESE interventions were performed in non-obstructive azoospermia cases. Data pooled from only 25 couples reflect the fact that sperm were found only in 48% of interventions. The intervention in NOA cases is performed in advance and most cycles had not been completed then; also, for various reasons embryos were not examined in some couples. Sperm were collected under the optical control of operation microscope Zeiss with magnification 10x to 25x; parallel histological examination confirmed moderate to severe impairment of spermatogenesis. Both parents underwent previous genetic tests; laboratory testing of the karyotype and cystic fibrosis gene tests, in men additional examination excluding Y chromosome microdeletions were performed.

Results:
In embryos fertilized with sperm obtained during microTESE, biopsy and testing of 8 chromosomes were completed. Only 48% out of all 184 examined cells did not display any numerical as well as morphological damage to the tested chromosomes. In embryo transfer without chromosome impairment, pregnancy was obtained in 58% cases.

Conclusion:
Combination of the sperm collection technique using optical control with transfer of only embryos genetically intact for the tested chromosomes represents an exceptionally effective method for treatment of the most severe forms of andrology cause of the couple sterility.

Author email: sobotka.vlada@seznam.cz

SEXUAL DYSFUNCTION IN MEN – UPDATE ON PATHOPHYSIOLOGY, IMAGING, AND MANAGEMENT TECHNIQUES OF ORGASMIC AND EJACULATORY DYSFUNCTION

Paduch D.A. 1, Bolyakov A. 1, Pacik D. 2, Kiper J. 1

1Department of Urology, Weill Cornell Medical College, Cornell University, New York, USA
2Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

Introduction:
Erectile dysfunction is a common problem among older and younger men with risk factors such as high blood pressure, diabetes or elevated cholesterol, but men of all ages, the same as women, suffer from low sexual drive, problems with orgasm, and ejaculatory dysfunction. Male orgasmic dysfunction for years has been an area of taboo among the men themselves, as well as their physicians, but with changing social attitudes about men and their health, more men feel comfortable talking to their physicians not only about the quality of their erections but also about problems with sex drive, orgasmic sensation, and ejaculatory function. Until recently the main obstacle in the evaluation of orgasmic and ejaculatory dysfunction has been the lack of well established and objective methods of measuring at a neurophysiological level what happens during male orgasm or ejaculation. We have recently developed and validated a new method of measuring physiological changes in the pelvic floor muscle, specifically the function of the bulbocavernosus muscle and pudendal nerve using highly sophisticated ultrasoundographic image processing. Using an ultrasound placed on the skin in the groin area we have measured and described physiological events in men with normal and abnormal orgasm and ejaculation. The aim of this study was to evaluate use of transperineal ultrasound in evaluation of orgasmic and ejaculatory function in men who presented with anorgasmia, hypoorgasmia, decreased penile sensation, and ejaculatory dysfunction.

Material and methods:
60 men age 18 to 60 years seen in single academic practice were evaluated with resolution 8-10MHZ linear probe with real-time signal acquisition. The diameter of bulbous urethra
Oral therapies (PDE-5 inhibitors) are the most recent treatment option for erectile dysfunction. Compared with existing alternative treatments, it is the most effective non-invasive therapy. In 1998, the first PDE-5 inhibitor approved by the FDA was sildenafil citrate (Viagra). This lecture provides clinical experiences and new horizons in therapy with Viagra.

Author email: dap2013@med.cornell.edu

We hope that this report will aid in development of validated and objective instruments to help those men who present with anorgasmia and ejaculatory dysfunction. This study showed that men who have no orgasm or decreased sensation of orgasm have dramatically decreased amplitude and frequency of bulbocavernous muscle contractures. This technique will help in identifying men with most central nervous system problems which may be more amendable to pharmacological treatment, and peripheral nervous system problems such as decreased sensation secondary to pudendal nerve neuropathy which may sometimes necessitate surgical treatment. Although initial studies focused on men with a history of prostate cancer who had decreased sensation of orgasm, most of his patients are young men in their 20 and 30s, for whom problems with ejaculation and orgasm are especially embarrassing and may negatively affect building confidence and interpersonal relationships. This novel approach represents a milestone in the objective measurement of one of the most intimate aspects of male sexuality, and has significant potential for improving success in the treatment of certain forms of sexual disorders in men. Although further research is needed in the optimal algorithm to evaluate men with orgasmic and ejaculatory dysfunction, this study takes us meaningfully closer to understanding the mechanisms by which the mind and body work together to express sexual response.

Author email: libor.zamecnik@lf1.cuni.cz
THE ROLE OF HYALURONIC ACID IN PBS/IC TREATMENT – AND ITS BENEFITS FOR THE SEXUAL FUNCTION

Bartl I., Misanko V., Setina R., Cano M.

Department of Urology, FnsP Bratislava, Ruzinov Branch, Slovak Republic

Introduction:
The pelvic pain treatment is a quite complicated problem with little success in determining its pathophysiological causes. The permanent or repeated chronic non-malignant pain, accompanied by functional involvement amplified by mental factors, will often end in a sexual dysfunction.

Material and methods:
Our team of authors from the Department of Urology of the University Hospital Ruzinov in Bratislava is presenting a group of patients from 2005-2007, who suffered from severe pelvic pain for at least 6 months. The patients, all with various diagnoses, were treated by using an intracavitary instillation of hyaluronic acid directly into the bladder.

Results:
After completing this treatment, we evaluated the various changes in CPP (chronic pelvic pain) before and after treatment by means of questionnaires. After the treatment, the patients reported a 64% overall improvement: 45% improvement in bladder control, 31% improvement in pain during or after sexual intercourse, 37% improvement in sexual function satisfaction, and 66% improvement in overall quality of life.

Conclusions:
Our goal is to present the intracavitary instillation of hyaluronic acid as a safe, well-tolerated, treatment with easy application. Its application can be done in a clinical environment; another significant fact when considering the pharmacoeconomic factor of PBS/IC treatment.

Author email: bartl1@post.sk

TESTOSTERONE DEFICIENCY SYNDROME AND AGEING MALE

Marencak J.

Department of Urology, Hospital with Policlinic Skalica, Slovak Republic

The elderly population is the fastest growing age group and a considerable attention is needed. Androgen decline represents one of the most important medical aspects of elderly. Testosterone Deficiency Syndrome (TDS) is a clinical and biochemical syndrome which results in significant detriment in the quality of life and adversely affects the function of multiple organ systems. The pathophysiology of T decline in elderly is not yet complete defined. Potential mechanism includes reduced hypothalamic GnRH outflow, impaired testicular steroidogenesis and altered sex - steroid negative feedback. Male hypogonadism is characterized by abnormally low serum testosterone levels associated with typical symptoms, including mood disturbance, sexual dysfunction, decreased muscle mass and strength, decreased bone mineral density, etc. By restoring serum testosterone levels to the normal range using testosterone replacement therapy, many of these symptoms can be relieved. For many years, injectable testosterone esters or surgically implanted testosterone pellets have been the preferred treatment for male hypogonadism. Recently, newer treatment modalities have been introduced, including long acting intramuscular injections, transdermal patches, gels and mucoadhesive sustained - release buccal tablets. The availability of new treatment modalities has helped to renew interest in the management of male hypogonadism, highlighting the need to address a number of important but previously neglected questions in testosterone replacement therapy. These include the risk and benefits of treatment in different patient populations (e.g. the elderly) and the need for evidence - based diagnosis and treatment monitoring guidelines. Internationally accepted evidence - based guidelines have been developed and would optimize patient care universally. This presentation has been drawn up to provide a short review of current trends and future directions in the diagnosis, therapy and monitoring of men suffering from late onset hypogonadism. Author discusses some opened questions and add one’s own experiences in this topic.

Conclusion: Androgen deficiency in older men is a true clinical entity. There is not now - nor has there ever been - a scientific basis for the belief that T causes prostate cancer to grow. Larger - scale and longer - term data are needed on the effects of T treatment in the older population to confirm safety on specific risk data on the prostate and cardiovascular systems.

Author email: marencak@ehs.sk
ANDROLOGY IN 21ST CENTURY – MAKING POSITIVE IMPACT ON MEN’S HEALTH

Paduch D.A.1, Bolyakov A.1, Pacik D.2, Kiper J.1

1Department of Urology, Weill Cornell Medical College, Cornell University, New York, USA
2Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

Andrology – clinical medicine focused on men’s reproductive health has dramatically evolved over last decade and Men’s Health specialists not only treat male infertility, but are actively involved in diagnosis and management of hypogonadism, sexual dysfunction, and prostate healthy, and preventive medicine. For younger men andrologist is a first physician they will see after leaving military service or school system. Although it was believed by some that younger men who present with infertility and sexual dysfunction rarely have any medical problems, growing evidence suggest that prevalence of hypogonadism, hypertension, diabetes, is quite high in the population of younger men seen in andrology practice. This review will discuss the epidemiology of low testosterone, risk factors, and methods of evaluation and treatment. We will then focus on osteopenia and osteoporosis which are seen in 38% and 6% of young hypogonadal men. Risk factors for osteopenia and osteoporosis can be found in 6% of hypogonadal men younger than 50 years. Results of basic science research, animal models with knocked-out estradiol and androgen receptors, and recent description of men with estradiol deficiency, indicate that sex steroids play an important role in normal bone physiology in men. Testosterone replacement therapy is indicated in most men with hypogonadism and low bone mineral density (BMD); however the benefits of testosterone treatment in eugonadal men are doubtful. Selective estradiol and androgen receptor modulators expand our treatment modalities in men in reproductive age when suppression of gonadotropins may interfere with one’s reproductive plans. Early detection of hypogonadism and osteoporosis may lower risk of hip and vertebral fractures in some men. Further prospective epidemiological studies are needed to prove cost-effectiveness of detection and the best treatment of osteoporosis in hypogonadal men of reproductive age.

Author email: dap2013@med.cornell.edu

KLINFEIFELTER SYNDROME: UNDERDIAGNOSED AND UNDERTREATED

Nieschlag E.

Institute of Reproductive Medicine of the University, WHO Collaboration Centre for Research in Male Reproduction, Münster, Germany

Klinefelter’s Syndrome (KS) is the most common genetic cause of human male infertility, but many cases remain underdiagnosed because of substantial variation in clinical presentation and insufficient professional awareness of the syndrome itself. In comparison to the general male population, KS is signified by a higher morbidity and mortality rate whereby diabetes mellitus, epilepsy, varicosis, thrombosis, embolism, bone fractures and psychic disturbances are prevalent. Because of the increased morbidity KS men should be overrepresented in medical practises and hospital wards. However, it is estimated that probably only one quarter of all KS patients is properly diagnosed throughout the course of their life. The variability in the KS phenotype can to some extent be explained by polymorphism of the androgen receptor. Early recognition and hormonal treatment of the disorder can substantially improve quality of life and prevent serious consequences. Testosterone replacement corrects symptoms of androgen deficiency but has no positive effect on infertility. However, nowadays patients with KS, including the non-mosaic type, need no longer to be considered irrevocably infertile, because intracytoplasmatic sperm injection offers an opportunity for procreation even when there are no spermatozoa in the ejaculate. In a substantial number of azoospermic patients, spermatozoa can be extracted from testicular biopsy samples, and pregnancies and live births have been achieved.

Author email: eberhard.nieschlag@ukmuenster.de
PROSTATE CANCER IN MEN WITH PSA – VALUES < 4 NG/ML

Lent V.

Department of Urology, Stiftshospital, Andernach, Germany

Introduction:
PSA cut point < 4 ng/ml is a compromise rather than a border-line of normality or irrelevance. In reality prostate cancer is present in 20 – 25 % of men with PSA-values < 4 ng/ml with no cut off point at all.

Material and methods:
The criteria of tumors and the results of prostatectomies were prospectively studied in our patients concerning the PSA-values at diagnosis being < 4 or > 4 ng/ml.

Results:
In patients with PSA-values < 4 ng/ml T2c tumor stages were more often (74%/59.4%), T3a and T3b stages were less often (10% - 25%), prostate margins and tumor grade were similar. Tumor control (PSA < 0.1 or > 0.1 ng/ml not rising) was more often achieved (76%/47%), continence (100%/100%) and potency (66%/69%) similarly. Radiotherapy was less often needed (20%/40%) with similar success. Androgen blockade was necessary in only one case of both groups.

Conclusions:
Prostate carcinomas with PSA-values < 4 ng/ml are not different from those with PSA-values > 4 ng/ml but more often organ confined and more often successfully treated by prostatectomy alone.

Author email: praxis@prof-lent.de

BRAIN-BODY INTERACTIONS: FUNCTIONAL SOMATIC SYNDROMES

Lucak S.

Department of Digestive and Liver Disease, Columbia University Medical Center, New York, USA

Functional disorders comprise a group of disorders that are primarily symptom-based, multi-systemic in presentation, and involve alterations in brain-body interactions. These disorders are poorly understood and inadequately treated. They have a major impact on health-related quality of life. Among others, they include interstitial cystitis (IC), pelvic pain syndromes, and irritable bowel syndrome (IBS). Although peripheral symptoms may be different, these disorders may share pathogenic mechanisms. The focus of this presentation will be on IBS and IC. Possible pathogenic factors involved in IBS include genetic (family clustering, single nucleotide polymorphisms, inherited psychological disorders), aversive early life events (child abuse), childhood and adult physical stressors (infection), sustained psychosocial stressors (chronic distress), and symptom-related anxiety (chronic symptoms).

IBS is a disorder of visceral hypersensitivity, altered motility, and CNS-brain dysregulation leading to enhanced pain (nociceptive) perception. Afferent nociceptive stimulation originates in the gut, projects to the spinal cord and ascends to the thalamus and brainstem. Finally, nociceptive stimulation reaches the anterior cingulated cortex (ACC) which is involved with brain processing of visceral pain. Descending visceral pathways, mediated by opioidergic, serotonergic, and noradrenergic systems, modulate pain transmission at the level of the dorsal horn of the spinal cord. This is called the “gate” control.

Using functional MRI (fMRI), IBS patients, in contrast to controls, showed a significantly greater activity in response to rectal distention (55mm Hg) in ACC. This may explain differences in pain reporting and behavior.

Women tend to present more frequently to physicians with functional disorders than men. Naliboff et al. found that female and male IBS patients differ in activation of brain networks. Females show greater activation of pain amplification (limbic and paralimbic) regions while males show greater activation of pain inhibiting regions. Lin Chang also found decreased thresholds to pain in women in response to rectal distention, suggesting enhanced visceral sensitivity. It is unknown if female hormones such as estrogen and/or progesterone play a role in these differences.

IBS is seen throughout the world. While there seems to be a larger female predominance of IBS in the Western countries, the presentation appears to be different in Asian countries where males prevail. This may reflect different health-care seeking behaviors in diverse parts of the world.

IBS and IC appear to share several features: chronic pain/discomfort, an increase in mast cells in lamina propria, and increased activation of afferent nerves (bladder and bowel) projecting to the spinal cord. Whether brain activation in response to bladder distention/stimulation occurs has not yet been studied using fMRI.

The functional somatic disorders pose a challenge to modern medicine because they are multisystemic in presentation and
A male factor is frequently involved among the infertile population entering ART treatment: 30–40% of men suffer of OAT and 5–8% need sperm retrieval procedures for obstructive/non-obstructive azoospermia. Studies applying FISH in human sperm start to show a higher frequency of aneuploidy in OAT patients and in TESE samples compared to normospermic ones. In our Centre FISH sperm analysis demonstrated that very few (<2%) normospermic men had semen samples with a high percentage of abnormal chromosomal complement, while the same figure ranged from 12% (moderate OAT) to 89% (TESE samples) in the infertile male population. Severe OAT and non-obstructive TESE spermatozoa generate a significantly higher incidence of aneuploid embryos compared to other groups, strongly suggesting a paternal contribution to embryonic aneuploidies when severe infertile sperm samples are used for ICSI. Gonosomal aneuploidies and complex abnormalities result the most frequently detected alterations in those embryos. For these patients, the possibility of performing aneuploidy screening by means of PGD on the generated embryos could represent a key approach in order to decrease such reproductive risk. A novel, promising approach to improve selection of aneuploidy-free sperms for ICSI is represented by the use of polarization microscopy. Recently our Center investigated with this tool the characteristics of birefringence in human sperm heads: the mature sperm nucleus is in fact characterized by a strong intrinsic birefringence resulting by a specific pattern of chromatin orientation. The proportion of birefringent spermatozoa resulted significantly higher in normospermic samples when compared with OAT samples with no progressive motility and TESE samples. When polarization microscopy was used for sperm selection at ICSI in a prospective randomized fashion, the rates of clinical pregnancy, ongoing pregnancy, and implantation were significantly higher in the study group versus controls.

Author email: segreterialg@sismer.it

While the influence of reproductive aging on the woman’s fertility is well known and extensively described, the influence of paternal age on couple’s fertility is less clear. While there is no clear upper age limit for fertility in the male there is accumulating evidence that increasing paternal age is associated with delayed conceptions as a sign of declining fecundity in older men. Aging in males is accompanied by a decrease in libido, declining plasma testosterone levels and also coital frequency declines almost linearly with age. As to fecundity of the couple, before the age of 40 declining coital frequency plays an important role while female physiology (ovarian ageing) is the major determinant of fecundity of the couple after the age of 40. Review of the literature suggests that increased male age is associated with a decline in semen volume, sperm motility and sperm morphology but not with sperm concentration. This leads to conclusion that the influence of age on male gametes production is more qualitative than quantitative. Infants born to older fathers have also a slightly increased risk of birth defects. However, given to weak association, paternal age appears to play a small role in the aetiology of birth defects. In contrast, it has been known for some time that paternal ageing is associated with certain dominant autosomal mutations giving rise to macroscopic malformations like achondroplasia. Marfan’s syndrome etc. This risk (0.3-0.5%) is much higher than that for children of young fathers and is similar to the risk of Down’s syndrome among the offspring of 35-40 years old mothers.

As a conclusion it seems resonable and consistent to recommend that both men and women complete their family before the age of 40 if possible.

Author email: tonko.mardesic@seznam.cz
DO CHLAMYDIA, MYCOPLASMA AND UREAPLASMA CONTAMINATIONS AFFECT SPERM QUALITY?

Veznik Z., Zajicova A., Svecova D., Kunetkova M., Prinosilova P.

Veterinary Research Institute, Department of Genetics and Reproduction, Brno, Czech Republic

Introduction: The role of Chlamydia, Mycoplasma and Ureaplasma species in male fertility has been studied for a long time. But, the information about their negative influence on semen quality and male fertility is still not very clear and the findings differ between authors. The aim of this study was to find if the presence of these microorganisms in male ejaculate can affect sperm quality.

Material and methods: Sperm analysis was performed on 742 ejaculates from 627 men consisting of semen volume, sperm concentration, sperm motility, sperm velocity by Baker’s propulsivity test, and morphology analysis using optical microscopy. The classification of normal spermatozoa was in accordance with the definition of the WHO laboratory manual (1999). Chlamydia in the ejaculates were detected by a direct immunofluorescent reaction using the Progen Biotechnik GmbH diagnostic set for detection of C. trachomatis, C. psittaci, and C. pneumoniae. The Mycoplasma and Ureaplasma detection were done by semen cultivation on PPLO Broth Base and PPLO Agar Base media (HiMedia Laboratories Pvt. Ltd., India).

Results: In total 49.2% of samples were contaminated. Chlamydia species alone were found in 13.4%, Mycoplasma species alone in 4.8%, Ureaplasma species alone in 20.6%, and mixed contamination were detected in 10.4% of ejaculates. In the Chlamydia positive group the quality of ejaculates was lower in all evaluated parameters. In the Mycoplasma positive group the sperm concentration was 29.6% lower (p<0.01) but we did not find any statistically significant differences between Ureaplasma positive and the control group in any of the sperm characteristics.

Conclusions: The results showed that both Chlamydial and Mycoplasmal contamination affect sperm quality, but we did not find any negative effect of Ureaplasmal contamination on sperm quality. The lower sperm concentration in Mycoplasma positive samples shows that there can be a possible negative influence of the microorganism on testis parenchyma.

Author email: prinosilova@vri.cz

INTERPRETATION OF 4000 PERFORMED SPERM ASSAYS, COMPARISON WITH ASSISTED REPRODUCTION RESULTS

Travnik P., Vesela K., Oracova E., Tauwinklova G., Vesely J., Hromadova L.

REPROMEDA, Brno, Czech Republic

Introduction: In our clinic we performed in the period 1999-2008 more than 4000 sperm assays. Obtained values were analysed and they were compared with related IVF/ICSI cycles outcome. The 1738 related IVF/ICSI cycles were used for the assisted reproduction outcome analysis, in 1395 of them was treated by ICSI alone, 215 by IVF alone, and 128 with both methods.

Material and methods: In concordance with WHO criteria, the volume, concentration, motility, morphology (using strict criteria in stained smears), total sperm count, total progressive motile sperm count, and total count of sperm with normal morphology were evaluated. They were parsed in the aspect of age, the cross correlation of above mentioned criteria, and the IVF and ICSI outcome (fertilization rate, embryo in vitro development, pregnancy rate, abortion rate).

Results: Sperm assays of 3345 men were carried out. The mean age was 32.6 years (16.9 to 76.9 years), the sperm concentration 68.0 millions per ml (0 to 560 millions per ml), motility A 26.5% (0 to 93%), motility B 27.6% (0 to 93%), normal morphology 20.9% (0 to 100%). The 3% of men were azoospermic and 0.75% cryptozoospermic. The concentration, motility, and sperm morphology was age dependent with some maxima and minima, with the apparent decline in the group from 56 to 77 years old men. The fertilization rate, in vitro development,
pregnancy rate and abortion rate were found to partially correlate with the sperm parameters.

Conclusions:
We found that the distribution of sperm values is rather logarithmic than normal, and set of examined men probably creates several independent subsets. The average sperm concentration, motility, and morphology exceed in our file the WHO criteria. The assisted reproduction outcome correlates only partially with the sperm parameters.

Author email: ptravnik@repromeda.cz

ROBOTIC ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY (Da VINCI PROSTATECTOMY – DVP): EXPERIENCE AND FIRST RESULTS AFTER 200 CASES

Kocarek J., Kohler O., Kaplan O., Belej K., Pokorny J.

Department of Urology, Central Military Hospital, Prague, Czech Republic

Introduction:
Laparoscopic approach has been developed for better visualization, minimal invasiveness and decrease of post-operative morbidity. Laparoscopic radical prostatectomy requires considerable skill and has a lengthy learning curve, and that’s the reason why at the beginning the operation time is so long. A lot of limitations of conventional laparoscopic approach can be overcome by the robotic surgical system da Vinci. Robotic assistance is becoming more and more useful for laparoscopic radical prostatectomy, specifically, where the objective is to preserve erectile function. Robotic assistance gives to laparoscopic surgery a lot of major advantages: 3D operative vision, a new generation of operative gestures (without any limits) and increased comfort for the surgeon during operative procedure. Many well renowned urologic teams and large centers have already adopted this technique for the practice of radical prostatectomy. It is clear today that robotic assistance allows a high quality of surgery, at least as good as laparoscopic or traditional surgery, with good conditions of safety for the patient and comparable oncological results. The problem is to know if the robotic approach, which is very expensive, represents a limit for its acquisition, can prove to be superior in results in any fields compared to the other kinds of prostatectomy. To answer to this question is very difficult to ascertain because of the subjectivity of appreciation of functional results and the need to develop prospective and if possible randomized clinical trials.

Material and methods:
We started robotic assisted surgery in December 2005, after several years of laparoscopic practice and can now present results of more than 250 cases of robotic prostatectomy. DVP was performed in patients with clinically localized prostate cancer. We used extraperitoneal surgical approach. All procedures were performed by the four-arm robotic system da Vinci (Intuitive Surgical California, USA). DVP was made in the retrograde manner in twenty-degree oblique position of the patient (Trendelenburg). We make a preperitoneal space by the digital dissection through the small incision under the navel. Two robotic ports are set up under the digital control in the right hypogastrium, the third robotic port and the assistant port are set up in left hypogastrum. We set the robotic camera trough the incision under the navel. The fibroadipose tissue covering the prostate was carefully removed to expose the pelvic fascia, puboprosthetic ligaments, and superficial branch of the dorsal vein were discontinued. We perform the robot assisted endopelvic fascia incision in both sides of the prostate, stitch ligature through the dorsal vein complex. After that we open the bladder neck, identify the deferents and excise the seminal vesicles. The key point is the identification and preservation of the neurovascular bundle. Lateral pedicles are clamped with the hem-o-lok clips and discontinued. After division of the prostate from rectum we cut the urethra as close as possible to the apex. We put the prostate into the extraction sack and we remove it out via the under-navel port. Urethrovesical anastomosis was closed by the continuous suture with the both side needles. Procedure was finished by the drain insertion and suturing of the incisions.

Results:
We have had no cases of per operative accident, two cases of laparoscopic conversion due to robot malfunction, one case of reoperation for problems of anastomotic failures, two cases of rectal injury (it was recognized and at once repaired) and less than 1% of cases we had to provide blood transfusions. The average operating time was 176 min. The mean rate of positive margins was 22% in PC stage, ranging from 10% to 36% depending on the surgeon’s experience and the choice of preservation technique. Concerning the post operative continence rate, 74% of the patients were fully continent after three months. Erection with the ability for intercourse was obtained in 34% after three months (with or without oral medication).

Conclusions:
After two years of experience with robotic radical prostatectomy, these results demonstrate that this operative technique is safe, reproducible and can offer oncologic results comparable
with the other techniques of radical prostatectomy. The main aspect of its evaluation as a surgical technique, will be in terms of the functional results which include continence, and, more importantly, post operative erections. Compared to laparoscopic radical prostatectomy the main benefit is much shorter learning curve.

Author email: jiri.kocarek@uvn.cz

SURGICAL TECHNIQUES USED IN TREATMENT OF MORBUS PEYRONI DISEASE

Hrabec M., Hartmann I., Vidlar A., Student V.

Department of Urology, Teaching Hospital Olomouc, Czech Republic

The aim of this study is to summarize current surgical techniques used in treatment of morbus Peyroni. Surgery is indicated when the disease is in stable phase at least 3 but better 6 months. The principle of the procedure is either elongation of the concavity of the penis (incision or excision of the plaque, patches) or shortening of its convex side (Nesbit procedure, pllication). In case of severe erectile dysfunction implantation of the penile prosthesis is indicated. Our own experiences are in correlation with presented literature data.

Author email: hrabecm@fnol.cz

ARGUS – A NEW SURGICAL METHOD IN THE TREATMENT OF MALE URINARY INCONTINENCE

Urban M.1,2, Heracek J.1,2, Novotny T.1, Hrbacek J.1, Palascak P.3

1Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University in Prague, Czech Republic
2 Androgeos, Prague, Czech Republic
3Centre Hospitalier General Paul Morel, Vesoul, France

Introduction:
Male urinary incontinence is a possible complication of prostatic surgery. It causes serious psychological problems and represents a socio-economic issue as well. The aim of this study is to evaluate the efficiency of a new surgical technique using ARGUS® sling.

Material and methods:
Between 2005 and 2007, 21 men with incontinence grade II-III were implanted the ARGUS sling. The average age was 67.5 years (54-74). Eleven patients had undergone radical retropubic prostatectomy for prostate cancer (PCa), 4 patients transurethral resection of the prostate and 1 patient open suprapubic prostatectomy for benign prostatic hyperplasia, 4 patients had undergone radical retropubic prostatectomy followed by adjuvant radiotherapy and 1 had been after perineal application of collagen seeds. Incontinence had lasted for at least 2 years and had been resistant to any conservative therapy.Physical and laboratory examination were performed in all patients undergoing surgery, as well as panendoscopy and urodynamic study. Urine cultivation was negative in all patients before surgery. The follow-up was performed using a quality of life questionnaire, evaluation of the continence and neurological symptomatology and, of course uroflowmetry with post-void residual volume.

Results:
Complete continence was achieved in 15 (71.5%) patients, 2 patients (9.5%) were improved, failure was noted in 4 patients (19%) – all of them had undergone adjuvant radiotherapy for PCa. Post-void residual urine volume was 0-45 ml after surgery. The sling proved as non-obstructive: Qmax in free uroflowmetry ranged between 10 and 32 ml/s. The results show an improvement of continence in 81% of 21 patients. Postoperative protrusion of the sling into the urethra was noted in 2 patients (9.5%), both of them had undergone radiotherapy. History of radiotherapy is a relative contraindication to the implantation of the sling.

Conclusions:
ARGUS adjustable male sling is a promising new step in the treatment of male urinary incontinence.

Author email: urban@androgeos.cz
MANAGEMENT OF POST-PROSTATECTOMY URINARY INCONTINENCE

Hanus T.

Department of Urology, General Teaching Hospital, Charles University, 1st Medical Faculty, Institute for Postgraduate Education of Physicians and Pharmacists, Prague, Czech Republic

The risk of urinary incontinence following radical prostatectomy (RP) has declined in the past decade because of advances in surgical techniques. Despite this improvement, the prevalence of postprostatectomy incontinence has risen, paralleling the increase in the number of surgical procedures performed annually. Factors influencing continence following RP are: preoperative (age, history of previous transurethral resection of the prostate, smoker, neurologic comorbidity, obesity, external-beam radiation or brachytherapy), intraoperative (stage, peri-prostatic anatomy, tension on the suture, the surgeon’s experience, preservation of the puboprostatic ligament, bladder-neck reconstruction, the type of urethrovaginal anastomosis, the impact of preservation of neurovascular bundles) and postoperative (the catheter time, management of extravasation etc). Conservative treatment includes: lifestyle alteration, bladder retraining, pelvic muscle exercises, biofeedback, anticholinergics, incontinence devices. Surgical procedures are: bulking agents, slings, artificial sphincter. New technologies (autologous skeletal muscle derived cells, derived stem cells etc.) are still only experimental and should continue to be evaluated.

Author email: tomas.hanus@lf1.cuni.cz

THE ROLE OF RISK MANAGEMENT IN THE QUALITY OF HEALTHCARE

Sobotka V., Mardesic T., Kosarova M., Weber V., Hlinka D.

Sanatorium Pronatal, Prague, Czech Republic

In the course of several past years, the question of healthcare quality was discussed from all angles, supported officially, and requested in some institutions; however, the level of the quality has often been defined chaotically, and it is not altogether clear what is to be expected from the various proposed systems. With the help of high-quality counselling, the team of the author’s institution has introduced a system which from the start allowed setting up written and graphic working protocols based on the detailed analysis of all processes, definition of weak points and their reconstruction, and their following synthesis. These protocols are elaborated into detail horizontally and vertically in the form of processes, according to the needs of individual procedures, but in all of them the risk parts are clearly determined. For each risk point there is a definition of potential hazards, their solution, and the competent person responsible for their solution. The risk management system introduced in this way represents the most powerful instrument for providing healthcare in highest quality with minimizing the risk of damage to the patient. Regardless of other undeniable benefits (economic), the sole possibility to decrease the risk of patients’ damage represents an unequivocal stimulus to introduce qualitative systems into the healthcare institutions.

Author email: sobotka.vlada@seznam.cz
QUALITY MANAGEMENT AND TRENDS FOR CERTIFICATION SCHEMES IN EUROPEAN HEALTHCARE INSTITUTIONS

Kohl H.

_LGA InterCert in Nurnberg and TUV Rheinland Cert, Koln, Germany_

Recent years have seen an increasing tendency for the development of certification schemes for practically all kinds of medical institutions and their departments, some of these schemes being even prescribed by law or other regulations. The talk is about these trends. Focus is on international standards as the ISO 9001, which is currently under revision - planned changes of this standard will be sketched. Detailed focus will be on the german experience with specific certification schemes for acute and rehabilitation clinics as well as for medical centers as breast cancer centers, stroke units and others. Schemes for sterilization departments and pharmacies will be presented as well. The presentation will be critical in nature and discuss frankly the positive and negative aspects in the field which became to be an industry on its own.

Author email: herfried.kohl@intercert.lga.de

PROGRESS IN ANDROLOGICAL ENDOCRINOLOGY

Starka L.

_Institute of Endocrinology, Prague, Czech Republic_

The aim of the study was to review present problems and recent findings in andrological endocrinology. Present guidelines for testosterone treatment of hypogonadism, especially in aging males, and for the methodology of androgen determination are discussed. Important advances highlighted mechanisms for internalisation of SHBG-bound testosterone into the target cell, therapeutic possibilities for paternity of men with Klinefelter’s syndrome, secular trends in decline of testosterone levels, prevention of prostate diseases of aging men, male hormonal contraception, andrological aspect of other diseases, especially of disturbed thyroid function, and the role of human feromones for gender identity.

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Author email: lstarka@endo.cz

CRYPTORCHIDISM IN CHILDHOOD AND TREATMENT STRATEGY: HORMONAL THERAPY OR SURGERY?

Snajderova M.

_Department of Paediatrics, Charles University, 2nd Medical School and University Hospital Motol, Prague, Czech Republic_

Cryptorchidism, defined as failure of the testis to descend into the scrotum represents an interdisciplinaty problem for paediatrician, paediatric endocrinologist and paediatric surgeon-urolologist. Undescended testis has a prevalence of about 30% in premature boys and 4% in full term boys. Spontaneous testicular descent usually occurs by the first year of life, when the prevalence declines to 1%. Undescended testis is usually unilateral (90%) and can be located along the inguinal canal (72%), distal to the external ring (20%) or intra-abdominally (8%). In rare instances, the testis deviates from the normal pathway (ectopic testis). The true undescended testis must be differentiated from retractile testis. Testicular neoplasm due to germ-cell degeneration and dysplasia, infertility due to lack of or decrease in the number of germ cells as a consequence of temperature-induced degeneration, and inguinal hernia are the most common complications of cryptorchidism. Histological abnormalities with decreased number of spermatogonia in undescended testis are reported as early as 3 months of age.

Treatment: the therapeutic goal in treating cryptorchidism is to a) prevent infertility, b) avoid malignancy, c) correct an associated hernia. Different protocols with human chorionic gonadotropin (hCG) and/or gonadotropin-releasing hormone
agonist (GnRHa) have been used with a range of success. Meta-analyses of randomised trials using hCG or GnRHa for treatment on testicular descent show overall efficacy of about 20%, less if retractile testes were excluded. Hormone treatment is more effective if undescended testis has been located immediately prescrotally. The optimal time to operate is unknown, the recommendation is to perform orchiopexy at 12 months. Numerous studies have reported that 75% of testes descend spontaneously by this age without any chance to descend thereafter.

**Conclusions:** There is general consensus that undescended testes should be brought down into the scrotum during childhood, in order to improve future spermatogenesis and make detection of tumours easier. The remaining questions concern how and when this should be done. Both treatment age and the method of treatment, whether or surgical, should be selected on the basis of fertility prognosis.

Author email: marta.snajderova@lfmotol.cuni.cz

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During the last few years, the general aging of the population and the growing knowledge about male hormonal changes in older age have lead the scientific community to focus on the clinical aspects of secondary hypogonadism in aging males. This syndrome is well defined by the term late-onset hypogonadism (LOH). LOH is a deficiency in gonadal function that results in low testosterone levels and variety of symptoms. The aim of the therapy is to establish a physiological concentration of serum testosterone in order to correct the androgen deficiency, relieve its symptoms and prevent long-term sequelae. The traditional benefits of testosterone on sexual function, mood, strength and quality of life remain the primary goals of treatment but possible beneficial effects on other parameters such as bone density, obesity, insulin resistance and angina are emerging and will be reviewed. Purpose of this article is to review author’s opinions with diagnosis and treatment and monitoring patients with LOH. Article reviews the advantages of available and investigational formulations of testosterone, admit recommendations of current guidelines for the treatment of hypogonadism. Potential concerns regarding the effects of testosterone on prostate disease especially in patients with risk of prostate cancer. The options available for treatment have increased in recent years with the availability of a number of testosterone preparations which can reliably produce physiological serum concentrations. Standardization of diagnostic procedures as well as emerging information concerning potential risks and benefits of testosteron therapy should increase extend of testosteron therapy also safe substitution therapy in patients at increased risk for prostate cancer.

Author email: acermak@fnbrno.cz
INFLUENCE OF THE 5α-REDUCTASE INHIBITOR TYPE 2 ON CIRCULATING NEUROACTIVE STEROIDS

Duskova M.1, Hill M.1, Hanus M.2, Matouskova M.2, Starka L.1

1Institute of Endocrinology, Prague, Czech Republic
2Urocentrum, Prague, Czech Republic

Introduction:
Two distinct 5α-reductase isoenzymes, type I and type II, are known in mammals. They are differentially expressed in tissues during distinct developmental stages and the expression is species specific. The enzyme is responsible for the reduction of testosterone to dihydrotestosterone, progesterone to dihydropregesterone and deoxycorticosterone to dihydrodeoxycorticosterone. These steroids and their metabolites (known as the neuroactive steroids) exhibit rapid non-genomic effects on brain function and behavior, primarily via an enhancement of γ-aminobutyric acid (GABAergic) inhibitory neurotransmission. Neuroactive steroids exert anticonvulsant, antidepressant and anxiolytic effects via GABA-A receptors. Finasteride is a 5α-reductase inhibitor which was originally used for the treatment of benign prostatic hypertrophy is also efficient for the treatment of male pattern hair loss (1 mg/day). There are some reports suggesting finasteride induction of depressive symptoms and anxiety in human. The steroid profile of patients treated by finasteride was followed only in urine. The profile was similar to that of male pseudohermaphrodites with inherited 5α-reductase deficiency.

Material and methods:
In our study a group of 20 men with benign prostatic hyperplasia was examined. In all individuals, their hormonal profile of steroid hormones in blood was determined. Finasteride in the daily dose of 5mg was administrated for 4 months. After the treatment the same hormonal profile was determined.

Results: The results showed significant decrease in circulating 5α-reduced C19 steroids (androsterone (p<0.008), epandrosterone (p<0.01), 5α-androstane-3β,17β-diol (p<0.01), and 5α-dihydrotestosterone (p<0.001). Surprisingly the levels of C19 3β-hydroxy-5-ene steroids significantly decreased as well (DHEA, p<0.03; 5-androstene-3β,17β-diol, p<0.04).

Conclusions:
In addition to the decrease of dihydrotestosterone level after treatment, the alteration in other 5alpha steroids metabolites was found, which could explain the depressive symptomatology.

The study was supported by grant No.NR/8525 – 5 of the IGA MZCR.

Author email: mduskova@endo.cz

OCCURRENCE OF ERECTILE DYSFUNCTION (ED), TESTOSTERONE DEFICIENCY SYNDROME (TDS), AND METABOLIC SYNDROME (MS) IN PATIENTS WITH BMI > 30, OR ABDOMINAL OBESITY

Fillo J.1, Breza J.1, Fillova M.2, Vachulova A.2, Dukat A.2, Krahulec B.2

1Comenius University, Urology, Bratislava, Slovak Republic
2Comenius University, General Medicine, Bratislava, Slovak Republic

Introduction:
The aim of the study was study the prevalence of ED, TDS, and MS in patients with BMI over 30 or waist circumference over 94 cm. TDS significantly decreased quality of life and occurrence is 38.7% in men over 45 years. MS is defined by the presence of at least three of the following: “abdominal obesity” (waist circumference over 94 cm), arterial hypertension, hypercholesterolemry, hypertriglyceridemia, diabetes mellitus or disorder of blood sugar tolerance. Metabolic syndrome increase risc of diabetes mellitus and heard disease. It is suspected that TDS can be next component of MS. This can be basis for treatment MS with testosteron.

Material and methods:
We have examined 79 patients over 50 years of age with body mass index (BMI) over 30 or with waist circumference over 94 cm. Hormonal evalutation as well as a complete urological evaluation (including PSA) and medical evaluation were carried out in every patient. To assess subjective symptoms related to TDS and 5 domains of sexual health, the Androgen Deficiency Questionaire and Sexual Health Questionaire were utilized. In all patients, the presence of prostate cancer was ruled out. Normal ranges of testosterone are 10-28 nmol/l. When results were in range 10-14 we examined free testosterone.
Results:
Total serum testosterone values decreased in 55/79, 32 below 10 nmol/l and 23 between 10-14. Free testosterone was 22-51%. Symptoms of TDS have 48 (87%) patients. ED had 50 (91%) and MS had 46 (83.6%) patients. Discussion Tsai et al. shows that all this 3 factors: obesity, insulin resistency or hypogonadismus can be introduction which leads to MS.

Conclusions:
Conclusion Symptomatic complex caused by the lack of androgens mainly in men over 50 years, is gradually becoming the topic of interest for urologists, andrologist and general practitioners. In respect to longer life expectancy and prolonged survival, the diagnosis and treatment of ED, TDS and MS may significantly improve the quality of life of the affected men. In patients with abdominal obesity we find out increased number of patients with TDS, ED and MS.

Author email: jfillo@zutom.sk

FERTILITY IN MALE PATIENTS WITH NEWLY DIAGNOSED HODGKIN’S LYMPHOMA

Smardova L.1, Kral Z.1, Crha I.2, Vasova I.1, Vorlicek J.1

1Department of Internal Medicine and Hematooncology, University Hospital and Faculty of Medicine, Masaryk University, Brno, Czech Republic
2Department of Obstetrics and Gynecology, University Hospital and Faculty of Medicine, Masaryk University, Brno, Czech Republic

Introduction:
The prognosis of patients with Hodgkin’s lymphoma (HL) has improved over the last decades. Depending on stage of disease, more than 80% of patients can be cured, but they are at higher risk for secondary malignancies and other late effects such as infertility. Even if the most HL patients are young, several studies have shown they have inadequate sperm quality even before cytostatic treatment.

Material and methods:
We evaluated semen and hormonal analysis in newly diagnosed patients with HL to demonstrate the fertility status at the time of diagnosis. We examined a total of 80 male patients, with median age 26 years (16-42). Most patients were in early clinical stage (33 patients; 41%), followed by the group of patients in advanced stage (28 patients; 35%) and in intermediate stage (19 patients; 24%). The semen samples parameters were compared with a reference set of 89 healthy men interested in sperm donation, with median age of 23 years (18-35). The t-test was used for statistical evaluations.

Results:
In 95% (N=76) of the patients, inadequate semen quality was established, with low sperm cell count and/or defective sperm morphology. Severe defects such as azoospermia and OAT were found in 14% (n=11) and 26% (n=21) patients respectively. In other patients, combined damages such as asthenospermia in 14% (n=11) and asthenoteratospermia in 41% (n=33) were identified. Normal findings were only established in 4 patients. In comparison with the control set of healthy men, statistically significant differences were found (p=0.05) in the average concentration (31.6 vs 55.7 mil/ml) and in the presence of progressively motile sperm cells (14.2% vs 43.6%). No deviation from the normal reference range of serum levels of FSH, LH and testosterone could be established in anyone of the patients.

Conclusions:
The majority of patients in our study had inadequate semen quality before treatment. The underlying mechanism is still unknown. Suspected factors include damage in the germinal epithelium, disturbance in the hypothalamic-hypophysial axis and the impact of the disease-related cytokines on spermatogenesis.

Author email: lsmardova@gmail.com
THE EFFECT OF THE NUTRITIONAL SUPPLEMENTS ON SPERM QUALITY

Konyckova I., Ilkova G., Harbulak P.

GYN-FIV, Centre of Gynecology and Reproductive Medicine, Bratislava, Slovak Republic

Introduction:
L-carnitine is an amino acid that has been shown to be crucial for the formation of healthy, active sperm. Ferulic acid has been shown to improve sperm quality as well. The antioxidants as vitamin C and vitamin E mixed with tocopherols, green tea extract and selenium improve overall reproductive health which help to improve sperm count and quality. Zinc and vitamin B complex (B6, B12, and folate) are critical nutrients in male reproductive system for adequate hormone metabolism, sperm formation and motility.

Material and methods:
The main aim of the study was to investigate the effect of nutritional blend on sperm quality in 56 male before and after nutritional treatment. Nutritional treatment lasted three months. L-carnitine, L-arginine, vitamin E, coenzyme Q10, selenium, zincum, glutation and folic acid are basic compounds of nutritional supplements that have been studied. Evaluation of sperm quality was performed according to WHO recommendations for semen analysis (1999).

Results:
56 patients were divided into three main groups according to the factor of sterility. The first group represents men with oligoasthenoteratozoospermia with total number of sperms under 5 million per millilitre. Patients with oligoasthenoteratozoospermia with total number of sperms over 5 million per millilitre included the second group and the third group included men with asthenoteratozoospermia. The improvement of sperm quality was observed in 12%, 31% and 6% of patients, respectively. The decrease of sperm quality was observed in the second (8%) and the third group (12%). 88% of patients in the first group, 61% of men in the second group and 82% of men in the third group represent men without any change in sperm quality.

Conclusions:
In conclusion, our results show that nutritional blend has only marginal improvement on sperm quality. It seems that avoidance of stress, enviromental contaminants, smoking, caffeine, drugs and alcohol consumption together (or alone) with nutritional supplementation can enhance sperm production more than nutritional supplementation alone.

Author email: konyckova@gyn-fiv.sk

A NEW APPROACH TO ASSESS OXIDATIVE STRESS IN HUMAN SEMEN

Fingerova H.1, Novotny J.2, Oborona I.1, Svobodova M.1, Brezinova J.1, Vyslouzilova J.1, Radova L.3

1Department of Obstetrics and Gynecology, Palacky University Medical School, Olomouc, Czech Republic
2Institute of Biology, Palacky University Medical School, Olomouc, Czech Republic
3Laboratory of Experimental Medicine, Palacky University Medical School, Olomouc, Czech Republic

Introduction:
Seminal oxidative stress (OS) has been implicated in the pathogenesis of male infertility. Reactive oxygen species (ROS) in human sperm were first measured in washed spermatozoa suspended in PBS using a chemiluminiscence method. First reports of levels of ROS in neat semen appeared only recently. The aim of our study was to assess ROS levels in both neat and processed semen using the same procedure and to compare the results in individual subjects.

Material and methods:
Ejaculates from 68 males from infertile couples were evaluated together with control ejaculates from 18 fertile volunteers. ROS production was measured first in 400 µl of neat semen and then in the same volume of washed sperm suspension containing a fixed density of spermatozoa. The light emission of added luminol was measured for 15 min and expressed as RLU/min. Data were log-transformed and analysed using Spearman’s nonparametric test.

Results:
Of 68 males from infertile couples 26 were normospermic as defined by WHO criteria, the remaining 42 had astheno- or asthenoteratospermia. ROS production in neat semen correlated well with ROS production in washed sperm suspension in PBS in all three groups of subjects, i.e. fertile volunteers, normospermic partners of infertile couples and even in those with sperm abnormalities (r = <0.89, 0.64 and 0.88, respectively).
ROS production in neat semen was lower compared to that in sperm suspension but the ratio varied in individuals as well as in groups.

Conclusions:
The ROS production in neat semen should give more exact information on the actual level of OS in the male reproductive tract without the need to simultaneously estimate the total antioxidant capacity of seminal plasma. More data are certainly needed to establish reference ranges in semen before the method can be introduced for diagnosis and treatment of male infertility.

The study was supported by the IGA Grant project No A18621-5. Author email: hefi@centrum.cz

MICROSURGICAL TECHNIQUES IN OBSTRUCTED SEMEN TRACT RECONSTRUCTION

Beharka R., Pacik D.

Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

The main purpose of announcement is to bring the information about possibilities of surgical reconstruction seminal ways obstruction azoospermia inductive. The authors bring the survey of possible solutions based on the ground of information from publication in reviewed technical literature. The possibilities of performance the vasovasastomosis and vasoepididymoanastomosis, their techniques, effectiveness and results are presented in the well-arranged announcement. Microsurgical reconstruction results in the restoration of spermatozoa to the ejaculate in 58-97% of cases. The return of spermatozoa to the ejaculate may provide the couple with an opportunity to conceive naturally or through assisted reproduction.

Author email: rbeharka@fnbrno.cz

TWENTY YEARS OF EXPERIENCE WITH PERCUTANEOUS ENDOVASCULAR TREATMENT OF VARICOCELE

Janik V.1, Labos M.1, Heracek J.2, Urban M.2, Padr R.3, Moravek J.3, Snajdauf J.3, Hanek P.4, Kawaciuk I.4

1Department of Radiology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
2Department of Urology, 3rd Faculty of Medicine and Teaching Hospital Kralovske Vinohrady, Charles University, Prague, Czech Republic
3Department of Surgery, 2nd Faculty of Medicine and Faculty Hospital Motol, Charles University, Prague, Czech Republic
4Department of Urology, 2nd Faculty of Medicine and Faculty Hospital Motol, Charles University, Prague, Czech Republic

Introduction:
The goal of our work was to assess the method, complications and results of endovascular treatment of varicocele in children and adults.

Material and methods:
Percutaneous endovascular treatment of varicocele was used in 474 adolescent and adults patients aged 9 - 45 years between 1987 and 2007. Endovascular treatment of varicocele consisted of percutaneous cathetrisation sclerisation of internal sper- matic vein from transjugular, femoral or cubital access with consecutive application of 4 different embolisation agents – coopolymer of Vilanol (123 patients), hot contrast material (59 patients), sclerisation agent Aethoxysclerol (268 patients) and tissue glue Histoacryl (24 patients).

Results:
The best results were achieved with sclerisation of an internal spermatic vein with Aethoxysclerol when varicocele was reduced or vanished in 236 (88%) patients, complications occurred in 19 (7.4 %) patients.
Conclusion:
With regard to our own experiences and the results we can recommend precutanous cathetrisation sclerotisation of internal spermatic vein by Aethoxysclerol from cubital access as an effective, safe and cheap alternative method for treatment of varicocele. The advantage of endovascular treatment is performing procedures on an outpatient basis, with minimal number of recurrences and complications.

Author email: janik@fnkv.cz

CURRENT THERAPEUTIC OPTIONS FOR THE MANAGEMENT OF PEYRONIE´S DISEASE

Cermak A., Pacik D.

Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

Peyronie´s disease (PD) is an acquired benign, often progressive fibrotic disease that presents with induration or scarring of the penis that may adversely affect male sexual function. The purpose of this article is to review our opinions and recommendations concerning state-of-the-art knowledge for the pathophysiology, diagnosis and treatment of PD. PD is characterized by pathologic fibroplasias, an abnormality in the control of local connective tissue regulation. Theory for the etiology of PD is penile microtrauma, followed by an abnormal wound healing. Induration is manifested as a palpable plaque of the penile shaft. Penile curvature, deformity and pain during erection can cause erectile dysfunction and difficulty with intercourse. Medical therapy including topical, systemic and intralesional is the initial treatment for PD. Intralesional injections (verapamil, interferon, clostridial collagenase) are showing significant improvement. There is a variety of other therapeutic options for the management of PD including extracorporeal and surgical possibilities (penile plication, Nesbit excision, plaque incision and grafting). Surgical outcome studies reveal that a stable deformity is best corrected with the least postoperative ED by a Nesbit procedure. Plaque incision and grafting should be reserved for men with good erectile function and marked penile shortening. Penile prosthesis is the treatment of choice in impotent patients. PD is often progressive fibrotic disease and can cause a complete loss of the ability for sexual intercourse. Combination of the therapy still may represent an effective approach to treatment. Careful consideration of the patients on case-by-case basis is essential. Patients have to be fully informed and have realistic expectations.

Author email: acermak@fnbrno.cz

MICROSURGICAL VARICOCELECTOMY

Beharka R., Pacik D., Khamzin A., Nussir M.

Department of Urology, University Hospital Brno, School of Medicine, Masaryk University, Brno, Czech Republic

Introduction:
Varicocelectomy is the most common procedure for male infertility. The introduction of microsurgical techniques has revolutionized the treatment of male infertility.

Material and methods:
Over a 4-year period, 217 patients underwent microsurgical varicocelectomy at our center. Pre-operative semen values were compared with the post-operative values.

Results:
Significant improvement of spermiogram occurs in 70.35%. Pregnancy rate 41%.

Conclusions:
Microsurgical varicocelectomy is a safe and effective option for management of varicocele-induced male infertility. It leads to improvement in all semen parameters and increases the possibility of spontaneous pregnancies.

Author email: rbeharka@fnbrno.cz
EARLY SURGICAL CORRECTION OF EXTENSIVE PENILE TRAUMA

Vrtal R., Kral M., Hrabec M., Student V.

Department of Urology, University of Palacky and Teaching Hospital Olomouc, Czech Republic

Introduction:
The main condition for good results after surgical repairs of traumatic disruption of corpora cavernosa is early detection and reconstruction of tunica albuginea. Pre-requisite for keeping of good quality erection is preservation of blood perfusion in all parts of corpora cavernosa.

Material and methods:
We treated 42 years old man with penile fracture injury during the sexual intercourse (a la cheval position). Because of horrible looking bleeding from the urethra he decided to insert a rough bandage around the radix penis. Time delay to investigation in our department was 45 minutes. He did not void spontaneously, drainage of the urine from the bladder was attached per epicystostomiam. Urethrography verified total urethral disruption and injury of corpora cavernosa. Surgical repair was done 70 minutes past penile trauma. We utilized knowledge about location of trauma and incised penis skin under defects. Boths corpora cavernosas were completely devided and connected only in dorsal parts of tunica albuginea. Urethra was completely disrupted with length of dystration defect 2.5 cm. First were reconstructed boths corpora cavernosa using single sutures. After spatulization we provided end to end urethroplasty.

Results:
Two months past procedure was reached normal uroflowmetry. Voiding now is as good as before traumatic episode. Patient is able to attach very good quality of erection, but we recommended him 2 months of sexual abstinence. Four months past procedure is visible light penile curvature without any influence to quality of erection.

Conclusions:
Extension of injury in this case is not typical for majority of penile fractures. In most cases is visible rupture of only one side corpora cavernosa and urethral injury is present occasionally.
For good result it is necessary early surgical repair and a very good patient compliance in postoperative period.

Author email: vrtalr@fnol.cz

THE EFFECT OF LOW DOSE OF VINCLOZOLIN ON REPRODUCTIVE TRACT DEVELOPMENT IN CD1 OUTBRED MICE

Peknicova J.1, Elzeinova F.1, Novakova V.1, Buckiova D.2, Kubatova A.1

1Laboratory of Diagnostics for Reproductive Medicine, Institute of Biotechnology, Academy of Sciences of the Czech Republic v. v. i., Prague, Czech Republic
2Department of Auditory Neuroscience, Institute of Experimental Medicine, Academy of Sciences of the Czech Republic, v. v. i., Prague, Czech Republic

The effect of low dose of fungicide vinclozolin within development of reproductive tract during gestation (GD) and puberty (PND) in outbred CD1 mice was tested. We found a decrease in the anogenital distance, prostate weight and pathology of testes in both experimental groups. Marked negative influence has had on sperm parameters. Sperm counts decreased to 46% (GD) and to 81% (PND) and also acrosomal state (evaluated by antiacrosomal antibody) decreased in both groups to 89% in comparison to control group (100%). Sperm head abnormalities increased about 18% and 13%, respectively. In this connection the expression some genes was changed (arosome–related gene (Acr), apoptosis related genes (p53, p21)). In conclusion, low dose of vinclozolin affected the reproductive tract, sperm parameters and expression of selected genes in both experimental groups.
The work was supported by the Grants of the Ministry of Education of the Czech Republic, grant No. 1M06011 and 2B06151 and in part by the Institutional Research Support AVOZ 50520701.

Author email: jpeknic@img.cas.cz
**Y-CHROMOSOME MICRODELETIONS: A CONTROVERSIAL INDICATION FOR PREIMPLANTATION SEX SELECTION IN PAIRS WITH ANDROLOGICAL FACTOR OF INFERTILITY**

Kosarova M., Siruckova K., Maskova S., Hlinka D., Weber V., Gregor V., Sobotka V.

*Sanatorium Pronatal, Prague, Czech Republic*

**Introduction:**
A genetic etiology has been proposed for some severe forms of idiopathic male infertility and a region of the Y chromosome long arm (Yq) defined AZF is thought to be critical for the regulation of spermatogenesis. To date, several genes have been identified in AZF, but the actual relationship between genotype and phenotype related to AZF deletions is not well characterized. ICSI performed using spermatozoa of this deleted patient will invariably pass this defect onto their male offspring. PGD for sex selection of preimplantation embryos is indicated in these patients.

**Material and methods:**
762 azoospermic and severe oligozoospermic patients from our IVF centrum were observed. Multiplex PCR strategy, 12 STSs in AZF region was used.

**Results:**
Microdeletions in AZF region were found in 15 men. Two pairs decided for PGD sex selection. Case report is presented in the oral presentation.

**Conclusions:**
Ethical and practical aspects of PGD indication for sex selection in Y-deleted men are discussed.

Author email: kosarova.marcela@seznam.cz

**AZFc REGION PARTIAL DELETIONS ON THE Y CHROMOSOME IN CZECH FERTILE MEN**

Norambuena P.1, Stambergova A.1, Piskackova T.1, Balascakova M.1, Koudova M.1, Gromoll J.2, Macek M. sr.1

1*Department of Biology and Medical Genetics, Charles University, 2nd Medical School and University Hospital Motol, Prague, Czech Republic.*

2*Institute of Reproductive Medicine, University of Münster, Münster, Germany*

**Introduction:**
Partial deletions in the AZFc and AZFb region of the Y chromosome are linked to subfertility, whereas AZFa is linked to complete infertility in the syndrome of Y chromosome microdeletions. The aim of this study is to determine the frequency of specific AZFc subdeletions (nanodeletions) - gr/gr, b1/b3 and b2/b3 in Czech fertile men.

**Material and methods:**
These types of AZFc/AZFb subdeletions were analyzed in 262 Czech fertile men by multiplex polymerase chain reaction (PCR) of specific markers in the AZFc region: gr/gr - sY1291; b2/b3 - sY1191; b1/b3 - sY1161, sY1191, sY1291. Moreover, the following markers, sY1206 and sY1201 from AZFc region were analyzed. The PCR products were made visible on 3% agarose gel.

**Results:**
The gr/gr deletions were found in 1.91 % in normal fertile Czech men population; other deletions b1/b3 and b2/b3 were found in 0.76 % and 2.29 % respectively. No other tested Y chromosome subdeletions in AZFc were found. These findings are not different from other Caucasian populations reported so far.

**Conclusions:**
These data provide the basis for further studies of male infertility associated with increased prevalence of the studied Y chromosome nanodeletions.

This study was supported by VZFN 64203 and NR9448-3/2007 grants.

Author email: patricia.norambuena@lfmotol.cuni.cz
Introduction:
The aim of this study was the determination of the genotype characteristics of FSH-R polymorphism in position -29 (A/A, A/G, G/G) and exon 10 N680S in fertile males in families indicated for prenatal diagnosis, or with risk of cystic fibrosis, risk of thrombophilic disorders and chronic pancreatitis disposition in Czech males.

Material and methods:
Polymorphism -29 (A/A, A/G, G/G) was examined in 303 males, exon 10 N680S in 304 males. The exon 10 and promoter polymorphisms were analyzed by allelic discrimination on ABI Prism 7000 detection system (Applied Biosystems).

Results:
The promoter polymorphism A/A was in 6.93%; A/G in 35.31%; G/G in 57.76%. Exon 10 polymorphism Asn/Asn was 27.96%; Asn/Ser in 50.33% and Ser/Ser in 21.71%. The genotype 680 exon 10 polymorphism Asn/Asn, Asn/Ser, Ser/Ser are not different from so far published prevalence in Caucasian population and from prevalence in females.

Conclusions:
These data provide possibility to compare the genotype characteristic of FSH-R polymorphisms for association studies in male reproductive disorders and for the pharmacogenetic strategy in hormonal treatment of male patients with regard to the highest FSH-R sensitivity of Asn/Asn genotype.

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Author email: macek.sekretariat@fnmotol.cz
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