

AEPCOS NEWSLETTER

ANDROGEN EXCESS & PCOS SOCIETY

FEBRUARY NEWSLETTER: AMH IN PCOS AND PCOM (ISOLATED OVARIAN MORPHOLOGY)

February newsletter is dedicated to AMH measurement in PCOM (women with isolated ovarian morphology) and in clinical diagnosis of PCOS. In fact, between papers published January 1st-February 1st, 2013, the editorial board selected the following paper:

Homburg R, Ray A, Bhide P, Gudi A, Shah A, Timms P, Grayson K. The relationship of serum anti-Mullerian hormone with polycystic ovarian morphology and polycystic ovary syndrome: a prospective cohort study. Hum Reprod 2013, Feb. 1

Daniel Dumesic, M.D., a member of our Editorial Board, has interviewed Roy Homburg, the author of the selected paper, and Didier Dewailly who has extensively studied this field.

This issue of the AEPCOS newsletter also includes the preliminary program of next Update Meeting of AEPCOS Society that will be held in Prague, Czech Republic, June 7, 2013. All information regarding this meeting may be found in our website: www.ae-society.org/annual-meeting

The registration form and some news regarding 11th Annual Meeting of AEPCOS Society are also included.

VOLUME 1, ISSUE 2 FEBRUARY 28, 2013

In this issue:

- * Prague AEPCOS Update Meeting
- * 11th AEPCOS Annual Meeting
- * AMH measurement in PCOM and PCOS

Editorial Board

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Jan McAllister, Ph.D., Hershey, PA, USA
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FORTHCOMING AEPCOS MEETINGS

- Update on Androgen Excess Disorders, Prague, Czech Republic, June 7, 2013
- Update on PCOS, Natal, Brazil, August 20-21, 2013
- Update on PCOS, Quito, Ecuador, September 25, 2013
- 11th Annual Meeting of Androgen Excess & PCOS Society, Newport, Rhode Island, USA, October 17-18, 2013

UPDATE ON ANDROGEN EXCESS DISORDERS

GRAND MAJESTIC PLAZA HOTEL, Truhlarska 16, Prague, Czech Republic

FRIDAY, JUNE 7

8:30—10:00 am **DIAGNOSIS OF PCOS**

Diagnosis and Phenotypes of PCOS

Enrico Carmina - Palermo, Italy

Adolescent PCOS

Enrico Carmina - Palermo, Italy

Morphological examination of ovaries

Daniela Fischerova - Prague, Czech Republic

10:15 am—12:30 pm **LONG TERM COMPLICATIONS**

Type II Diabetes

Alessandra Gambineri - Bologna, Italy

Ischemic heart disease

Jan Pitha - Prague, Czech Republic

Cancer

Michael Fanta - Prague, Czech Republic

Role of obesity and adipose dysfunction

Harpal Randeva - Warwick, United Kingdom

1:00—3:00 pm **TREATMENT OF PCOS**

Oral contraceptives

Michael Fanta - Prague, Czech Republic

D vitamin

FRIDAY, JUNE 7

Ivica Lazurova - Prague, Czech Republic

Metformin

Djuro Macut - Belgrade, Serbia

Lifestyle

Urszula Tworowska-Bardzinska - Wroclaw, Poland

Low dose flutamide

Anna Maria Fulghesu - Cagliari, Italy

4:00—5:00 pm **PREGNANCY IN PCOS**

Complications of pregnancy

Ezter Vanky - Trondheim, Norway

Virilization in pregnancy

Natasa Kanova - Prague, Czech Republic

5:00—6:30 pm **CONGENITAL ADRENAL HYPERPLASIA**

Neonatal screening

Felix Votava - Prague, Czech Republic

CAH in childhood

Stanislava Kolouskova - Prague, Czech Republic

CAH in adults

Michel Pugeat - Lyon, France

ANNUAL MEETING OF AEPCOS SOCIETY

Newport, Rhode Island, USA,



11th Annual Meeting of AEPCOS Society will be held at the HYATT REGENCY RESORT HOTEL, 1 Goat Island, Newport, Rhode Island 02840, USA, October 17-18, 2013. The meeting will start October 17 at 4 PM to permit to people attending IFFS/ ASRM meeting in Boston (that meeting is scheduled to finish October 17, at 1 PM) to can participate to AEPCOS meeting sessions. Newport is located 72 miles from Boston Convention Center (about 1 hour and 20 minutes by MA-24S). Transportation from Boston Convention Center to Newport Hyatt Regency Resort will be provided (bus leaving at 1:30 PM) but has to be reserved at least 15 days before.

Newport may be easily reached by car, by flight (25 miles from International T.F. Green/airport— PVD) or by train (18 miles from West Kingston railway station —along New York-Boston railway). For additional information on transportation, contact: info@ae-society.org

The venue of 11th AEPCOS Annual meeting, Hyatt Regency Resort Hotel, is situated on Goat Island. Surrounded by Narragansett Bay, the hotel offers the seclusion of a private island, just minutes to downtown Newport. The resort provides water shuttle (and van shuttle) to/from downtown Newport.

Abstract deadline is August 2, 2013. For abstract form and preliminary program, please connect to: www.ae-society.org or contact: info@ae-society.org

REGISTRATION FORM

11TH AEPCCS ANNUAL MEETING

REGISTRATION ONLY

_____AEPCCS members \$260 _____Non AEPCCS members \$360

NEWPORT HYATT REGENCY RESORT

\$219 for night ___October 16 ___October 17 ___October 18

Payment amount: \$_____ Credit card payment: ___VISA ___MasterCard ___AMEX

Credit card number_____ Expiration date:_____/____

Cardholder
name_____

Online payment_____ To safely pay online, connect to: www.ae-society.org

Check payment_____ Make checks payable to Androgen Excess Society

Email, mail or fax the registration form to: Androgen Excess & PCOS Society, via delle Croci 47, 1st floor, suite 10, 90139 Palermo, Italy. Fax: +39-091328997, Email: info@ae-society.org

Only written cancellation by fax or e-mail will be accepted. For cancellations until September 1, 2013, a 50% fee will be applied. No refund will be given after that date. Registration includes welcome reception, lunch (Oct 17) 2 coffee breaks. Hotel prices include \$20 Resort Fee (parking, in room high-speed internet, water shuttle or van shuttle to/from Downtown Newport, resort activities, access to fitness center, 2 bottled waters for night) but do not include 13% combined city and state occupancy taxes.

The certificate will be issued to the name of the accredited participant.

To get registration form in word, please contact: info@ae-society.org

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Roy Homburg, M.D.

PCOM AND AMH

Daniel Dumesic has interviewed Roy Homburg, who is one of the founding members of AEPCOS Society. Roy is National Advisor on Fertility, Maccabi Medical Services, Israel and Head of Research, Homerton Fertility Centre and Honorary Professor, Queen Mary, University of London, United Kingdom.

1. You mention that, based upon the serum AMH conditions, PCOM is an abnormal condition with a granulosa cell abnormality similar, but not as severe, as that of PCOS. Is it possible that women with PCOM alone can simply be "normal" (having infertility from other causes) and merely exhibit a mildly elevated serum levels from a larger cohort of normal preantral/ small antral follicles?

Let me start to answer this question, rather typically, by asking another question: What is "normal"? Women with PCOM have significantly more small follicles than women with "normal" ovaries and this is reflected by the significantly higher AMH concentrations. They also differ from women with normal ovaries in that they have significantly less circulating FSH and also a trend of a higher mean LH. This places them in a position midway between normal and PCOS. If it is accepted, as it is by most, that the basic lesion of PCOS is within the ovary and the symptoms are influenced by extra-ovarian factors (obesity and insulin, LH) then it is reasonable to assume that those who will develop symptoms of PCOS in later life are much more likely to be those with PCOM rather than those with normal ovaries. This we intend to demonstrate by following up our PCOM group to see how many of them will eventually develop symptoms. Further, as Didier's group have demonstrated so elegantly, the number of small follicles is key in determining the severity of symptoms.

2. I notice that your patient population has a much lower average BMI than that reported in other studies, particularly those from the United States. How do you think the presence of obesity would affect your study results?

It is true that in Europe and the Middle East, we cannot compete with the average BMI in the USA where you do everything big. In our study the BMI's of the groups were deliberately matched to rule out any influence of BMI on our results. However, in an ongoing study conducted by Sachin Kulkarni in India in which I am involved, we have clearly demonstrated that, in a large group of PCOS women, the higher the BMI, the higher the AMH (and also the higher the insulin and androgen levels).

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Didier Dewailly, M.D.

AMH IN PCOS AND PCOM

Dan Dumesic has also interviewed Prof. Didier Dewailly, member of AEPCOS Society from 2003, who is a well known expert in the matter of AMH and PCOS. Didier is Head of the Department of Endocrine Gynecology and Reproductive Medicine, Hospital Jeanne de Flandre, Centre Hospitalier de Lille, France

1. Didier, different papers offer various serum AMH cut-offs for the diagnosis of PCOS. What are the current challenges in establishing the optimal serum AMH values as positive- and negative-predictors of PCOS, based upon phenotype, age, etc?

Before anything else, I want to emphasize strongly the fact that the determination of AMH should not be used as a predictor of PCOS but as a predictor of PCOM. My opinion is that it does not exist, and that there will probably never, a unique marker of PCOS. The diagnosis remains a body of evidence, which was perfectly rationalized with the Rotterdam consensus classification.

The issue is therefore to establish a threshold value for serum AMH to eventually replace the third item of this classification, namely PCOM. To determine this threshold, a ROC curve has to be built, but not using non-PCOS vs. PCOS populations. Knowing that there are a number of women with PCOM in the normal population, a non-PCOS population should not be used as the reference population. This was done in numerous studies that yielded either a poor specificity, or an acceptable specificity, but with a very high threshold of AMH, and therefore, poor sensitivity. The right approach, as done in the Roy's study, is to isolate normal women with PCOM and not use them in the ROC analysis.

The main challenge is therefore to define what is normal, as Roy has reminded us in his answer to the first question. The second challenge is to obtain a uniform determination of AMH, which is problematic at present. There are indeed several assays, giving values that cannot be superimposed an assay to another. We should also remember that there is still no international standard for these assays.

If we accept the idea that a high AMH is an equivalent of PCOM, the problem of phenotype does not arise: the diagnosis of PCOS will be retained when a high AMH is associated to hyperandrogenism and/or ovulation disorder, that's it. That AMH correlates with the severity of symptoms is interesting on a pathophysiological point of view but this does not impact the diagnostic issue. If AMH level is high, without any symptoms, it is, according to some (and as Roy, I'm part of it) a "silent PCOS" or according to others, a variant of normal, but in any case a genuine PCOS! Lastly, age is not a major problem because AMH levels are fairly stable between 15 and 30 years, the age in which most cases of PCOS are revealed.