

JANUARY NEWSLETTER

AEPCOS GUIDELINES ON SONOGRAPHIC DIAGNOSIS OF POLYCYSTIC OVARIES

January newsletter is dedicated to the new guidelines on sonographic diagnosis of polycystic ovaries that have been prepared by a special AEPCOS Committee. This is a very important document that modifies extensively the Rotterdam sonographic criteria for diagnosis of PCO. The guidelines will be published on Human Reproduction Update where are already available online: *Dewailly D, Lujan M, Carmina E, Cedars M, Laven J, Norman R, Escobar Morreale H. Definition and significance of polycystic ovarian morphology: a task force report from the Androgen Excess and Polycystic Ovary Syndrome Society. Hum Reprod Update 2013, December 16.* The editor has interviewed Didier Dewailly who was the Chairman of this special AEPCOS Committee and two experts in ovarian morphology who are members of AEPCOS Society but did not participate to the preparation of the guidelines.

Some important news about the final venue of 12th Annual Meeting of AEPCOS Society are reported. The meeting will be held at Kauai Marriott Resort Hotel and Beach Club, Kauai, HI, USA, October 22-23, 2014.

From this issue Tracy Bekx, M.D., leaves the editorial board of the newsletter because she has been nominated Chairman of the Educational Committee of AEPCOS Society. While we thank Tracy for all her work with the newsletter, we welcome the new member of Editorial Board: Ellen Connor, M.D., Associate Professor of Pediatric Endocrinology at the Wisconsin University..

VOLUME 2, ISSUE 1

JANUARY 31, 2014

In this issue:

- * AEPCOS guidelines on ovarian sonographic diagnosis of PCO
- * 12th Annual Meeting of AEPCOS Society

Editorial Board

Enrico Carmina, M.D., Palermo, Italy
 Ellen Connor, M.D., Madison, WI, USA
 Daniel Dumesic M.D., Los Angeles, CA, USA
 Joop Laven, M.D., Rotterdam, The Netherlands
 Jan McAllister, Ph.D., Hershey, PA, USA
 Poli Mara Spritzer, M.D., Porto Alegre, Brazil

FORTHCOMING AEPCOS MEETINGS

- 12th Annual Meeting of Androgen Excess & PCOS Society, Kauai Marriott Resort Hotel and Beach Club, Kauai, Hawaii, USA, October 22-23, 2014
- Update Meeting of AEPCOS Society, San Diego, CA, USA, March 4, 2015
- 13th Annual Meeting of AEPCOS Society, Palermo, Italy, October 4-6, 2015

12TH AEPCOS ANNUAL MEETING, KAUAI, HAWAII, OCTOBER 22-23, 2014

The 12th Annual meeting of the AEPCOS Society will be held at Kauai Marriott Resort Hotel and Beach Club, Kalapaki Beach, Kauai, Hawaii, USA, October 22-23, 2014, immediately after the Honolulu ASRM Annual Meeting. The venue of next annual meeting is a wonderful resort that is located in the very beautiful island of Kauai. The airport of Lihue, only one mile from the resort by free shuttle, may be



reached by a short 20 minutes flight from Honolulu. Several airlines serve this route with more than 10 daily flights. Lihue airport may be reached also by daily direct flights leaving from main Western USA and Canada cities including Los Angeles, San Francisco, Phoenix, Seattle and Vancouver.

We have negotiated a very good rate at the Kauai Marriott that will be available to all registered guests for the duration of the meeting and for the following three days. While all resort hotels in Hawaii ask for a mandatory resort fee (generally \$30 daily) that is not included in the price of the rooms, we have obtained that the resort fee will be optional. **As a special bonus for pre-registered (before October 1, 2014) AEPCOS and ASRM members flying to Lihue from Honolulu, we will reimburse \$100 of the ticket price (actual cost of the return ticket is \$103). AEPCOS members flying directly to Lihue from continental USA will get \$50 reimburse.**

REGISTRATION FORM

12TH AEPCOS ANNUAL MEETING

REGISTRATION ONLY

____ AEPCOS members \$260 ____ Non AEPCOS members \$360

KAUAI MARRIOTT RESORT HOTEL AND BEACH CLUB

\$219 for night

____ October 22 ____ October 23 _____ Number and dates of additional nights

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 lunch and 2 coffee breaks. Price of the rooms are for garden view rooms. Add \$30 for partial ocean view. Hotel prices do not include 13.42% taxes that may be paid directly at the hotel.. Resort fee (\$30 daily) is optional. **Pre-registered (before October 1, 2014) AEPCOS and ASRM members flying the route Honolulu-Lihue will get a reimburse of \$100 of air ticket price. Pre-registered AEPCOS members flying directly to Lihue from continental USA will get a reimburse of \$50.**

Reimburses will be available at the meeting. ASRM members should provide proof of their membership.

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

**ANDROGEN
EXCESS &
PCOS SOCIETY**

12520 Magnolia Boulevard,
North Hollywood,
CA 91607, USA

Email :
info@ae-society.org

www.ae-society.org



Didier Dewailly, M.D.

AEPCOS GUIDELINES ON OVARIAN SONOGRAPHIC DIAGNOSIS OF POLYCYSTIC OVARIES

This month's Newsletter is dedicated to the new guidelines of AEPCOS Society regarding the sonographic diagnosis of Polycystic Ovaries. It is a very important document because it will interest not only experts but also all practitioners and researchers involved in diagnosis of PCOS. More than one year ago, AEPCOS formed a special committee, chaired by Didier Dewailly, that included Marla Lujan, Enrico Carmina, Marcelle Cedars, Joop Laven, Robert Norman and Hector Escobar-Morreale. After long discussions, the Committee has prepared the final document that has been accepted for publication on Human Reproduction Update and is already available online. All members who do not have access to Human Reproduction Update may ask to our office for a copy of the guidelines.

The editor of AEPCOS Newsletter has asked to Didier Dewailly to summarize the most important points of the guidelines. Didier Dewailly is Head of the Department of Endocrine Gynecology and Reproductive Medicine, Hospital Jeanne de Flandre, Centre Hospitalier de Lille, France.

1. Why new guidelines for sonographic diagnosis of PCO were needed?

Didier Dewailly - There was an urgent need to review the recommendations for ultrasound diagnosis of PCO because several publications in recent years have reported an unusually high incidence of sonographic appearance of PCO in populations of normal young women, totally asymptomatic. In some studies, the incidence could be as high as 80% ! This phenomenon only affects the follicle count, while the figures obtained with ovarian volume tend to remain stable.

Ourselves in Lille, were well aware that the old threshold established in Rotterdam in 2003 for the number of follicles per ovary, namely 12, was no longer appropriate. This is due to the technological evolution of ultrasound machines that now allows the use of very high frequency probes, improving sharply the definition of images, and showing more small follicles compared to older devices. We must therefore consider now that the « Rotterdam threshold » of 12 follicles per ovary is not suitable for devices whose maximum frequency of the probe is greater than 8 MHz.

**ANDROGEN
EXCESS &
PCOS SOCIETY**

12520 Magnolia Boulevard,
North Hollywood,
CA 91607, USA

Email :
info@ae-society.org

www.ae-society.org

2. Can you summarize the most important news in diagnostic criteria of PCO?

Didier Dewailly: We have recently updated the diagnostic criteria for PCOM in a review published in Human Reproduction Update, under the auspices of the AEPCOS. Our main conclusions are that the threshold for ovarian volume to 10 ml, as was held in Rotterdam, can be kept. However, the threshold for the maximum number of follicles per normal ovary should be placed to 25 if a latest generation ultrasound is used. Otherwise, the means of follicular counting remain unchanged: it must involve the ovary as a whole and not just a longitudinal section, 3D ultrasound appears to be no significant improvement and the results are broadly similar to those obtained by 2D ultrasound, the count should be performed in both ovaries and if it is excessive in at least one ovary, the diagnosis of PCOS should be retained.

3. What were the most debated issues?

Didier Dewailly: Some items were particularly discussed, in particular the use of an age-appropriate standards. In most series, follicular count varies little between 25 and 35 years and it seems easier to use only one upper limit of normal in this age range.

The use of the assay of the serum Anti- Müllerian Hormone (AMH) level in lieu of follicular counting was also highly debated. Certainly, this marker would greatly simplify things and would allow us to overcome variations of follicular counting that is machine- and operator-dependent. However, for the moment, the serum AMH assay must yet be considered as a tool for clinical research and cannot be applied to the routine practice. In fact, with currently marketed assays, problems of standardization and calibration persist. It is hoped that these problems will be solved in the near future but it will take some time to get results from large series of control subjects and patients with PCOS before we can use this marker with a consensual threshold.

4. If practitioners do not have access to sophisticated sonographic technology, how morphologic diagnosis of polycystic ovaries should be performed?

Didier Dewailly: For the moment, if the practitioner does not have access to a last generation ultrasound, it is advisable to use rather the ovarian volume with a threshold of 10 ml.

Finally, in practice, we must admit that the morphological confirmation of PCOM is not strictly required if other possible causes of oligo-anovulation and/or hyperandrogenism are carefully eliminated by clinical analysis and appropriate hormonal work-up. According to the Rotterdam classification now admitted by all, if oligo-anovulation and hyperandrogenism coexist, the diagnosis of PCOS can be accepted without ultrasound. In case of isolated oligo-anovulation or hyperandrogenism, in the absence of ultrasound confirmation of PCO, one cannot decide between PCOS and idiopathic hyperandrogenism or oligoanovulation. However, this is not really a problem because the management will be the same anyway, including lifestyle modifications if there are metabolic abnormalities, but this is another story...

**ANDROGEN
EXCESS &
PCOS SOCIETY**

12520 Magnolia Boulevard,
North Hollywood,
CA 91607, USA

Email :
info@ae-society.org

www.ae-society.org

The editor has interviewed two experts in ovarian sonography: Jeffrey Chang and Anna Maria Fulghesu. Jeffrey Chang, M.D., is Professor of Obstetrics and Gynecology at University of California in San Diego. He has been one of the pioneers in the studies on PCOS and has a large experience in all clinical and diagnostic aspects of the syndrome including issues related to morphologic diagnosis of polycystic ovaries. Anna Maria Fulghesu, M.D., is associate professor of Obstetrics and Gynecology at Cagliari University, Cagliari, Italy. Anna Maria has written many papers on ovarian sonography and some years ago has suggested that the ratio stroma/total ovarian volume may be used as a diagnostic tool of polycystic ovaries.

1. What is your opinion about the new AEPCOS guidelines on sonographic diagnosis of PCO?

Jeffrey Chang: I thought this was a very scholarly effort and well written. It was more broadly applicable than much of what has appeared previously. The task force is to be congratulated for the section on Guidelines for clinical practice. It is highly suitable for the practitioner and provides clear indications of how to proceed with patients.

Anna Maria Fulghesu: The need of new guidelines has depended on new technologies in ovarian ultrasound imagine. In fact, the number of follicles that may be observed inside ovaries has increased and the use of Rotterdam criteria may determine not corrected diagnoses of polycystic ovaries. Analyzing 6 published papers where new ultrasound technology was used, the authors report that in 1127 normal women the follicle count was between 11 and 23. Instead, in women with PCOS, the number of follicles that may be observed is higher and a new threshold of 25 was suggested. However, this threshold is based on only 2 papers (Lujan and Dewailly) for a total number of 160 patints. Therefore, while a modification of old Rotterdam values regarding follicle count is clearly needed, probably more studies are needed to can determine the exact threshold to use.

2. What issue should need a more detailed discussion

Jeffrey Chang: The paragraph on Guidelines for Clinical practice is inadequate. As the authoritative body on this subject, the task force should make a stronger statement as to what practitioners should consider PCOM. After all, since the 2004 Rotterdam guidelines were published 80% of papers have included this definition and readers, i.e., including practitioners, use this measure in assessing their patients. Moreover, lecturers and speakers have also embraced this definition. Therefore, the task force should not abdicate this responsibility and make some suggestion other than leave “each center to define in-house values”. This is only going to lead to more confusion among practitioners and patients. This is very disturbing.

In addition, I would suggest more emphasis on lack of evidence for significant metabolic consequences for internists and primary care specialists.

Finally, the section of future research suggests that the cut values should be 23-25 FNPO for all subsequent studies. However, given that cut off values may vary among various ethnic populations (page 4, right column, 5th paragraph), would it be appropriate to apply the same “in-house” principle for establishing normative values? While efficiency, expertise and carefulness of ultrasound exams in different ethnic studies may be questioned, one has to assume best effort.

ANDROGEN EXCESS & PCOS SOCIETY

12520 Magnolia Boulevard,
North Hollywood,
CA 91607, USA

Email :
info@ae-society.org

www.ae-society.org

Anna Maria Fulghesu: I believe that the increase of ovarian stroma in polycystic ovaries should require much more attention. Not only my own experience but that of other groups has shown that the S/A ratio may be very useful in diagnosis of polycystic ovaries. (Fulghesu 2001 80 patients, 2006 51 patients and 2007 418 patients, Belosi 2006 375 patients , Li Sun 2007 75 patients , Battaglia 2012 112 patients). On this respect, this methodic may be more simple and repetible than the ovarian follicle count.

A final comment of the editor.

The editor has participated to the preparation of the guidelines and to the long discussion that has lasted more than one year. In addition, all attendees to Newport AEPCOS annual meeting had the opportunity to participate to a in depth discussion that regarded many different points including the importance of follicle count, the utility of evaluating follicles in the entire ovary or in a ovarian section, the role of S/A ratio, the ethnic problems and so, so... Many issues need to be clarified and all the matter is in continuous evolution. However, these guidelines represent a very good effort for using in clinical practice and in research the new information that advances in technology are determining.

Guidelines are not perfect science (if perfect science exists) and sometimes reflect more the opinion of the authors than the available data. Many times guidelines are just a compromise between different ideas. However, best guidelines have been useful not only as a tool for clinicians but also for challenging old ideas and influencing future research. Rotterdam (and AEPCOS) guidelines for diagnosis of PCOS are a perfect example of it. Old concepts on diagnosis of PCOS were challenged and new ideas, on what the disorder is, have emerged. We hope that the new guidelines on PCO morphology will be useful not only as a simple tool for diagnosing PCO morphology but also as a way to change ideas and concepts that last from too much time and are not anymore appropriate to the new technological reality. As Jeff Chang says: *since the 2004 Rotterdam guidelines were published, 80% of papers have included this definition and readers, i.e., including practitioners, use this measure in assessing their patients. Moreover, lecturers and speakers have also embraced this definition.* Well. it is time to change because the world around us has changed.

OTHER MEETINGS

- **PATH meeting:** Estrogen exposure and metabolism. March 21-22, 2014, Bethesda Marriott, Bethesda, MD 20184, USA
- 12th Annual World Congress on Insulin Resistance Diabetes and Cardiovascular Disease. November 20-22, 2014, Sheraton Hotel Universal City, Los Angeles, CA, USA