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IEWS AND REVIEWS

4 Introduction: Contemporary perspectives on congenital adrenal hyperplasia: impacts on reproduction

M. I. New and Z. Rosenwaks
New York, New York

In this Views and Reviews, we present four perspectives on current diagnostic approaches and treatments for congenital adrenal hyperplasia.

7 Classic congenital adrenal hyperplasia and its impact on reproduction

L. G. Gomes, T. A. S. S. Bachega, and B. B. Mendonca
São Paulo, Brazil

The fertility rate in women with virilizing forms of congenital adrenal hyperplasia is lower than in the general population owing to a lower desire for achieving motherhood.

13 Fertility in patients with nonclassical congenital adrenal hyperplasia

M. I. New, L. Ghizzoni, H. Meyer-Bahlburg, A. Khattab, D. Reichman, and Z. Rosenwaks
New York, New York; and Turin, Italy

We discuss the history of nonclassical congenital adrenal hyperplasia as well as the pathophysiology, diagnosis, and treatment of the disorder.

21 Prenatal genetic testing and treatment for congenital adrenal hyperplasia

J. L. Simpson and S. Rechitsky
Miami, Florida; and Northbrook, Illinois

In utero treatment of 21-hydroxylase congenital adrenal hyperplasia by dexamethasone prevents genital ambiguity in affected females. Noninvasive detection is now possible, and preimplantation genetic testing allows selection of only unaffected embryos.

24 Genetics of congenital adrenal hyperplasia and genotype-phenotype correlation

M. L. Narasimhan and A. Khattab
New York, New York; and New Brunswick, New Jersey

The mechanisms leading to CYP21A2 gene defects are gene conversion and deletions. The well-established correlation between CYP21A2 mutations and the associated clinical phenotype remains subject to some discordances.

INKLINGS

30 At last, an orally active gonadotropin-releasing hormone antagonist

R. J. Paulson
Los Angeles, California

ASRM PAGES

32 Prepregnancy counseling

Committee Opinion No. 762
Birmingham, Alabama; and Washington, D.C.

The goal of prepregnancy care is to reduce the risk of adverse health effects for the woman, fetus, and neonate by working with the woman to optimize health, address modifiable risk factors, and provide education about healthy pregnancy.

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Valencia, Spain

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M. Kathrins
Boston, Massachusetts

ORIGINAL ARTICLES

ANDROLOGY

61 **Fine mapping the MHC region identified rs4997052 as a new variant associated with nonobstructive azoospermia in Han Chinese males**

M. Huang, M. Zhu, T. Jiang, Y. Wang, C. Wang, G. Jin, X. Guo, J. Sha, J. Dai, X. Wang, and Z. Hu
Nanjing, People's Republic of China

Fine-mapping analysis of MHC region with 981 nonobstructive azoospermia (NOA) patients and 1,657 controls identified two potentially functional variants, rs7194 and rs4997052, associated NOA susceptibility.

ASSISTED REPRODUCTION

69 **Transfer of embryos with segmental mosaicism is associated with a significant reduction in live-birth rate**

T. Zore, L. L. Kroener, C. Wang, L. Liu, R. Buyalos, G. Hubert, and M. Shamronki
Los Angeles, Thousand Oaks, and Agoura Hills, California

Transfer of segmental mosaic compared with euploid embryos results in a reduced live birth.

77 **Deoxyribonucleic acid detection in blastocoelic fluid: a new predictor of embryo ploidy and viable pregnancy**

M. C. Magli, C. Albanese, A. Crippa, C. Tabanelli, A. P. Ferraretti, and L. Gianaroli
Bologna, Italy

The presence of DNA in blastocoelic fluids negatively correlates with the blastocyst ploidy condition defined by trophectoderm cell biopsy and with the implantation potential of trophectoderm-euploid blastocysts.

Autologous mitochondrial transfer as a complementary technique to intracytoplasmic sperm injection to improve embryo quality in patients undergoing in vitro fertilization—a randomized pilot study

E. Labarta, M. J. de los Santos, S. Herráiz, M. J. Escribá, A. Marzal, A. Buigues, and A. Pellicer
Valencia, Spain; and Rome, Italy

In patients with a background of low embryo quality, autologous mitochondrial transfer did not improve the pregnancy outcome or the blastocyst formation or euploid embryo rate compared with conventional ICSI.

Effect of in vitro culture period on birth weight after vitrified-warmed transfer cycles: analysis of 4,201 singleton newborns

J. Zhang, Y. Wang, H. Liu, X. Mao, Q. Chen, Y. Fan, Y. Xiao, and Y. Kuang
Shanghai, People's Republic of China

Birth weights of singletons following blastocyst transfer were higher than those after cleavage-stage embryo transfer in vitrified-warmed cycles.

Developmental potential of slow-developing embryos: day-5 morulae compared with day-5 cavitating morulae

J. Haas, J. Meriano, R. Bassil, E. Barzilay, E. Zilberman, and R. F. Casper
Toronto, Ontario, Canada; and Tel Aviv, Israel

Transfer of fresh slow-developing embryos seems to improve the cycle outcomes compared with culturing for another day and then vitrifying and thawing later.

ENVIRONMENT

Phthalates exposure and uterine fibroid burden among women undergoing surgical treatment for fibroids: a preliminary study

A. R. Zota, R. J. Geller, A. M. Calafat, C. Q. Marfori, A. A. Baccarelli, and G. N. Moawad
Washington, DC; Atlanta, Georgia; and New York, New York

Some phthalate biomarkers, including di(2-ethylhexyl) phthalate metabolites, are positively associated with uterine volume among women undergoing surgery for fibroids. Results support the hypothesis that phthalate exposures are associated with fibroid outcomes.

EPIDEMIOLOGY

Links between age at menarche, antral follicle count, and body mass index in African American and European American women

S. M. Schuh, J. Kadie, M. P. Rosen, B. Sternfeld, R. A. Reijo Pera, and M. I. Cedars
Moraga, San Francisco, and Oakland, California; and Bozeman, Montana

Earlier age of menarche is associated with both higher BMI and higher antral follicle counts in adulthood in both African American and European American women.

GENETICS

What are patients doing with their mosaic embryos? Decision making after genetic counseling



A. G. Besser, D. H. McCulloh, and J. A. Grifo
New York, New York

Patient decisions regarding mosaic-embryo transfer were assessed. More than one-fourth of patients without euploid embryos pursued transfer; those who pursued additional treatment had a greater chance of ongoing pregnancy.

INFERTILITY

Self-reported infertility, metabolic dysfunction, and cardiovascular events: a cross-sectional analysis among U.S. women

J. L. Gleason, E. D. Shenassa, and M. E. Thoma
College Park and Baltimore, Maryland; and Providence, Rhode Island

After adjusting for demographic, lifestyle, and behavioral factors, women who reported ever experiencing infertility had higher odds of reporting symptoms consistent with metabolic syndrome and cardiovascular events.

MENTAL HEALTH

Clinical course of depression symptoms and predictors of enduring depression risk in women with polycystic ovary syndrome: Results of a longitudinal study

E. A. Greenwood, L. A. Pasch, K. Shinkai, M. I. Cedars, and H. G. Huddleston
San Francisco, California

Obesity is a predictor of enduring depression in polycystic ovarian syndrome.

REPRODUCTIVE ENDOCRINOLOGY

157 Elevation of antimüllerian hormone in women with polycystic ovary syndrome undergoing assisted reproduction: effect of insulin

X. Y. Liu, Y. J. Yang, C. L. Tang, K. Wang, J.-J. Chen, X. M. Teng, Y. C. Ruan, and J. Z. Yang
Shanghai and Hong Kong, People's Republic of China

AMH is elevated in blood and follicular fluid in PCOS during ART. Insulin increases AMH expression, and AMH counteracts insulin-promoted aromatase expression in human luteinized granulosa cells.

168 Metabolic disturbances in non-obese women with polycystic ovary syndrome: a systematic review and meta-analysis

S. Zhu, B. Zhang, X. Jiang, Z. Li, S. Zhao, L. Cui, and Z.-J. Chen
Jinan and Shanghai, People's Republic of China

Nonobese women with PCOS suffer higher risk of metabolic disturbances including insulin resistance, hyperinsulinemia, impaired glucose tolerance, diabetes, dyslipidemia, and metabolic syndrome compared with nonobese controls.

REPRODUCTIVE SCIENCE

178 Expression of erythropoietin messenger ribonucleic acid in wild-type *MED12* uterine leiomyomas under estrogenic influence: new insights into related growth disparities

R. Asano, M. Asai-Sato, S. Matsukuma, T. Mizushima, M. Taguri, M. Yoshihara, M. Inada, A. Fukui, Y. Suzuki, Y. Miyagi, and E. Miyagi
Kanazawa-ku and Asahi-ku, Yokohama, Kanagawa, Japan

Expression of erythropoietin mRNA in wild-type *MED12* uterine leiomyomas increases with E₂. Leiomyoma without *MED12* mutation may grow larger compared with mutated type, probably because of estrogen-stimulated overexpression of erythropoietin.

REPRODUCTIVE SURGERY

186 Screening and evaluation of potential recipients and donors for living donor uterus transplantation: results from a single-center observational study

F.-A. Taran, D. Schöller, K. Rall, S. Nadalin, A. Königsrainer, M. Henes, H. Bösmüller, F. Fend, K. Nikolaou, M. Notohamiprodjo, C. Grasshoff, E. Heim, S. Zipfel, N. Schäffeler, T. Bakchoul, N. Heyne, M. Guthoff, B. Krämer, C. Reisenauer, M. Hoopmann, K.-O. Kagan, M. Brännström, D. Wallwiener, and S. Y. Brucker
Tübingen, Germany; and Göteborg and Stockholm, Sweden

We report our experience with screening and selection of potential living donors and recipients in the first-ever German uterus transplantation program. Meticulous preoperative screening is mandatory to maximize transplantation success.

ERRATA

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Cover image provided by Marta Shahbazi, laboratory of Magdalena Zernicka-Goetz. A human embryo cultured in the laboratory until embryonic day 10 in the absence of maternal tissues. At this stage the embryonic epiblast cells have initiated the formation of the amniotic cavity. These cells are surrounded by the developing extra-embryonic tissues (hypoblast and trophoblast). To view a color version of the image please visit: https://www.fertstert.org/cover_v111. © 2018 Marta Shahbazi