Abstracts

COVID-19 and gynecological cancers: Asia and Oceania Federation of Obstetrics and Gynecology oncology committee opinion

Ka Yu Tse1, Efren J. Domingo2, Hiralal Konar3, Suresh Kumarasamy4, Jitendra Pariyar5, Brahmana A. Tjokroprawiro6, Kimio Ushijima7, Perapong Inthasorn8, Ai Ling Tan9, and Sarikapan Wilailak10, The Oncology Committee, Asia and Oceania Federation of Obstetrics and Gynecology

¹Department of Obstetrics and Gynaecology, The University of Hong Kong, Pokfulam, Hong Kong, ²Department of Obstetrics and Gynaecology, University of the Philippines, Philippine General Hospital, Manila, Philippines, Department of Obstetrics and Gynaecology, Agartala Government Medical College, Agartala, India, ⁴Gleneagles Penang Hospital, George Town, Malaysia, ⁵Gynecologic Oncology Unit, Civil Service Hospital, Kathmandu, Nepal, ⁶Department of Obstetrics and Gynecology, Medical Faculty, Universitas Airlangga, Surabaya, Indonesia, ⁷Department of Obstetrics and Gynaecology, Kurume University, Kurume, Japan, ⁸Department of Obstetrics-Gynecology, Siriraj Hospital, Mahidol University, Bangkok, Thailand, ⁹Ascot Hospital, Remuera, New Zealand, ¹⁰Department of Obstetrics and Gynecology, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

Since the outbreak of COVID-19, there have already been over 165 million people being infected and it is expected that the pandemic will not end in near future. Not only the daily activities and lifestyles of individuals have been affected, the medical practice has also been modified to cope with this emergency catastrophe. In particular, the cancer services have faced an unprecedented challenge. While the services may have been cut by the national authorities or hospitals due to shortage of manpower and resources, the medical need of cancer patients has increased. Cancer patients who are receiving active treatment may develop various kinds of complications especially immunosuppression from chemotherapy, and they and their carers will need additional protection against COVID-19. Besides, there is also evidence that cancer patients are more prone to deteriorate from COVID-19 if they contract the viral

infection. Therefore, it is crucial to establish guidelines so that healthcare providers can triage their resources to take care of the most needed patients, reduce less important hospitalization and visit, and to avoid potential complications from treatment. The Asia and Oceania Federation of Obstetrics and Gynecology (AOFOG) hereby issued this opinion statement on the management of gynecological cancer patients during the COVID-19.

Source: J. Obstet. Gynaecol. Res. Vol. 47, No. 5: 1643–1650, May 2021

High intensity focused ultrasound treatment for diffuse uterine leiomyomatosis: a feasibility study

Xiaofei Zhanga, Tian Tianb, Jialiang Zhuc, Bin Lina, Xiao Fenga, Lian Zhangd, Xinhua Yanga and Aixingzi Ailia a

^aDepartment of Gynecology, Shanghai First Maternity and Infant Hospital, Tongji University School of Medicine, Shanghai, China; ^bDepartment of Gynecology, Shanghai Xinhua Harvard Medical Center, Shanghai, China; ^cDepartment of MRI, Shanghai First Maternity and Infant Hospital, Tongji University Scholl of Medicine, Shanghai, China; ^dState Key Laboratory of Ultrasound Engineering in Medicine Cofounded by Chongqing and the Ministry of Science and Technology, Chongqing Key Laboratory of Ultrasoundin Medicine and Engineering, College of Biomedical Engineering, Chongqing Medical University, Chongqing, China

Objective: To investigate the safety and efficacy of high-intensity focused ultrasound (HIFU) treatment for diffuse uterine leiomyomatosis (DUL).

Methods: Eight patients with DUL were admitted to the Department of Gynecology of Shanghai First Maternity and Infant Hospital and underwent HIFU treatment. MRI was performed before and one day after HIFU treatment for the evaluation of lesion ablation. The uterine size was measured at 3-8 months after HIFU ablation. The menstrual volume score and serum levels of hemoglobin and CA125 were measured pre-HIFU ablation and 12-36 months post-HIFU ablation.

Results: After an average of 5.9 months of follow-up after HIFU treatment, an average uterine volume reduction of 67.6% was observed. Menstruation returned to normal in all patients, and their serum HGB and CA-125 levels also returned to normal after an average of 19.1 months of clinical follow-up. The quality of life of all patients improved significantly.

Conclusion: HIFU treatment is safe and effective in the treatment of patients with DUL.

Source: International Journal of Hyperthermia 2020, VOL. 37, NO. 1, 1060–1065

Live birth rate after IVF/ICSI in women with low and extremely low AMH: an age matched controlled study

Yomna I. Zaghloul1,2* ,Yahia M. Amin1 , Ragaa T. Mansour1, Ahmed Serour1,3, Mona M. Aboulghar1,2, Mohamed A. Aboulghar1,2 and Gamal I. Serour1,3

Correspondence: yomnaizaghloul@gmail.com 1 The Egyptian IVF Center, 3 Street No. 161 Hadayek El-Maadi, Cairo 11431, Egypt 2 Faculty of Medicine, Cairo University, Cairo, Egypt

Background: An age-matched controlled study, to assess the outcome of IVF/ICSI in low and extremely low AMH levels in different age groups by comparing the live birth rate Materials and methods: An agematched controlled study was done at the Egyptian IVF center, Cairo, Egypt, including 306 infertile women with low AMH levels undergoing IVF/ICSI and an age-matched number of women with normal AMH. The live birth rate in the different age groups according to the AMH level was compared. Results: There was no significant difference between LBR in the extremely low AMH arm (11.43%) and low AMH (16.4%) (P = 0.24). The LBR was 30.4% in women with normal AMH as compared to 14.7% in all women with AMH below 1 pg/ml (P = 0.002). The LBR was significantly higher in women below the age of 35 years and women of 35-40 years with normal AMH (33.2% and 31.7%) as compared to LBR in the corresponding age groups with low AMH (18.6% and 13.3%). Conclusions: There was no difference in the outcome of IVF between patients with low and extremely low AMH levels. Women with normal AMH level resulted in a higher pregnancy rate as compared to women with low AMH level in the same age group.

Age is important in determining prognosis of IVF in patients with low levels of AMH.

Source: Zaghloul et al. Middle East Fertility Society Journal (2020) 25:2 https://doi.org/10.1186/s43043-019-0014-x

Impact of COVID-19 on Pregnancy

Chiu-Lin Wang^{1,2,3}, Yi-Yin liu1², Chin-Hu Wu², Chun-Yu Wang⁴, Chun-Hung Wang⁵, Cheng-Yu Long^{1,2,3*}

¹Department of Obstetrics and Gynecology, Kaohsiung Municipal Siaogang Hospital, Kaohsiung Medical University, Kaohsiung, Taiwan, ²Department of Obstetrics and Gynecology, Kaohsiung Medical University Hospital, Kaohsiung, Medical University, Kaohsiung, Taiwan, ³Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan. urolong@yahoo.com.tw, ⁴Advanced mechanical engineering with management MSc, School of Engineering, University of Leicester, United Kingdom, ⁵Department of Nursing, Fooyin University, Ta-Liao District, Kaohsiung, Taiwan

Coronavirus disease 2019 (COVID-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and is an emerging disease. There has been a rapid increase in cases and deaths since it was identified in Wuhan, China, in early December 2019, with over 4,000,000 cases of COVID-19 including at least 250,000 deaths worldwide as of May 2020. However, limited data about the clinical characteristics of pregnant women with COVID-19 have been reported. Given the maternal physiologic and immune function changes during pregnancy, pregnant women may be at a higher risk of being infected with SARS-CoV-2 and developing more complicated clinical events. Information on severe acute respiratory syndrome (SARS) and Middle East Respiratory Syndrome (MERS) may provide insights into the effects of COVID-19's during pregnancy. Even though SARS and MERS have been associated with miscarriage, intrauterine death, fetal growth restriction and high case fatality rates, the clinical course of COVID-19 pneumonia in pregnant women has been reported to be similar to that in nonpregnant women. In addition, pregnant women do not appear to be at a higher risk of catching COVID-19 or suffering from more severe disease than other adults of similar age. Moreover, there is currently no

evidence that the virus can be transmitted to the fetus during pregnancy or during childbirth. Babies and young children are also known to only experience mild forms of COVID-19. The aims of this systematic review were to summarize the possible symptoms, treatments, and pregnancy outcomes of women infected with COVID-19 during pregnancy.

Source: International Journal of Medical Sciences 2021; 18(3): 763-767. doi: 10.7150/ijms.49923

Vertical Transmission of Coronavirus Disease 19 (COVID-19) from Infected Pregnant Mothers to Neonates: A Review

Mojgan Karimi-Zarchia,b, Hossein Neamatzadehc,d, Seyed Alireza Dastgheibe, Hajar Abbasif, Seyed Reza Mirjalilid,g Athena Behforouzf, Farzad Ferdosiang,h and Reza Bahramii

a Department of Obstetrics and Gynecology, Iran University of Medical Sciences, Tehran, Iran; b Endometriosis Research Center, Iran University of Medical Sciences, Tehran, Iran; c Department of Medical Genetics, Shahid Sadoughi University of Medical Sciences, Yazd, Iran; d Mother and Newborn Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran; eDepartment of Medical Genetics, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran; f Department of Obstetrics and Gynecology, Shahid Beheshti University of Medical Sciences, Tehran, Iran; g Department of Pediatrics, Shahid Sadoughi University of Medical Sciences, Yazd, Iran; h Children Growth Disorder Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran; i Neonatal Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

Background: Since early December 2019, the Coronavirus Disease 19 (COVID-19) infection has been prevalent in China and eventually spread to other countries. There are a few published cases of COVID19 occurring during pregnancy and due to the possibility of motherfetal vertical transmission, there is a concern that the fetuses may be at risk of congenital COVID-19. Methods: We reviewed the risk of vertical transmission of COVID-19 to the fetus of infected mothers by using data of published articles or official websites up to March 4, 2020. Results: A total of 31 infected pregnant mothers with COVID19 were reported. No COVID-19 infection was detected

in their neonates or placentas. Two mothers died from COVID-19-related respiratory complications after delivery. **Conclusions:** Currently, based on limited data, there is no evidence for intrauterine transmission of COVID-19 from infected pregnant women to their fetuses. Mothers may be at increased risk for more severe respiratory complications.

Source: Fetal and Pediatric Pathology https://doi.org/ 10.1080/15513815.2020.1747120

Impact of placenta previa with placenta accreta spectrum disorder on fetal growth

E. Jauniaux¹, I. Dimitrova², N. Kenyon³, M. Mhallem⁴, N. A. Kametas², N. Zosmer², C. Hubinont⁴, K. H. Nicolaides² and S. L. Collins³

¹EGA Institute for Women's Health, Faculty of Population Health Sciences, University College London, London, UK, ²Fetal Medicine Research Institute, King's College Hospital, Harris Birthright Research Centre, London, UK, ³Nuffield Department of Women's and Reproductive Health, University of Oxford, Oxford, UK, ⁴Department of Obstetrics, Saint Luc University Hospital, Universite Catholique ´ de Louvain, Brussels, Belgium.

Objectives: To evaluate fetal growth in pregnancies complicated by placenta previa, both with and without PAS, compared to pregnancies with just a low-lying placenta. Methods: This was a multicentre retrospective cohort study of singleton pregnancies complicated by placenta previa, both with and without placenta accreta spectrum (PAS), for which maternal characteristics, ultrasound estimated fetal weight and birthweight were available. The control group chosen was singleton pregnancies with a low-lying placenta (0.5-2cm from the internal os). For comparison, the study groups were matched for smoking status, ethnic origin and gestational age at delivery. The diagnosis of PAS and depth of invasiveness was confirmed at birth using both a pre-defined clinical grading score and histopathological examination. Four maternal-fetal medicine units participated in data collection of diagnosis, treatment, and outcomes. Results: The study included 82 women with previa-PAS, subdivided into adherent previa-PAS (n= 35) and invasive previa-PAS (n= 47) and 146 women with a placenta previa. There were 64 controls with a lowlying placenta. There was no significant difference in the incidence of small-for-gestational age (SGA) and

Abstracts

large-for-gestational age (LGA) between the study groups at the different percentiles cut-off values. The median gestational age at diagnosis was significantly (P=0.002) lower in the placenta previa than in the low-lying placenta group. No significant difference was found between previa-PAS and placenta previa groups for any of the variables. The median EFW percentile was significantly higher in the adherent compared to the invasive subgroup (P=0.048). The actual birthweight percentiles at delivery did not differ significantly (P=0.804) between the subgroups. **Conclusions:** No difference was seen in fetal growth

for pregnancies with a previa-PAS when compared with placenta previa and low-lying placenta. There was also no increased incidence of either SGA or LGA babies when a placenta previa was complicated by PAS when compared to a previa which separated spontaneously at birth. Neonatal outcome in previa-PAS is linked to premature delivery and not to impaired fetal growth.

Source: Obstet Gynecol 2019; 54: 643–649 Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/uog.20244