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Coronavirus-induced severe acute respiratory syndrome and obstetrics and gynecological activities

All European Ob-Gyn professionals have had to modify their daily activities due to the COVID-19 pandemic and spread of SARS-CoV-2-induced severe acute respiratory syndrome (SARS).

The gynecological activities currently carried out are restricted to oncological surgical procedures, management of acute and severe gynecological diseases, and obstetric follow-ups and deliveries. With regard to surgical procedures, recommendations aimed at avoiding contamination of surgical staff were recently published on the website of the ESGE (European Society of Gynecological Endoscopy). Specific steps have to be followed to minimize CO₂ release, especially during insertion and removal of ports, as surgical smoke could possibly contain viral particles, even though, to date, no specific data on the presence of COVID-19 virus in surgical smoke can be found in the literature. Fortunately, the majority of laparoscopic procedures performed in the field of gynecology can be postponed, with the result that few indications for these surgeries remain at the present time.

Since we have no previous experience of this new viral infection, many questions are being asked about the risk to pregnant women and neonates. In general, because of the physiological adaptive state and the relative immunosuppressive state associated with pregnancy (increased oxygen consumption, elevated diaphragm, and so on), pregnant women are more susceptible to respiratory germs. For example, pregnant patients were four times more likely to be admitted to hospital during the 2009 AH1N1 pandemic ^[1].

However, it seems that pregnant women are no more susceptible to COVID-19 infection than the general population, and their symptoms are similar.

Principles for the management of pregnant women with confirmed or suspected COVID-19 have been detailed in the literature ^[2].

Once a maternal COVID-19 infection is suspected or confirmed, specially adapted procedures should be followed in order to protect the hospital staff, while also ensuring that the pregnant woman receives the necessary obstetric and medical care.

Such situations, and the procedures to follow, requiring multidisciplinary expertise, were discussed before the spread of COVID-19 in our maternity units. However, due to the rapidly evolving situation, regular adaptation of these procedures is

needed, which is very time consuming and necessitates coordination of hospital staff. Local or national protocols for the management of possible or proven cases of COVID-19 in pregnant women may therefore evolve on a daily basis with spread of the disease and advances in our knowledge of it ^[3].

Although there is still only limited evidence on COVID-19 in pregnancy, we can summarize current knowledge in the following points ^[4,5]:

- there have been no cases of maternal death or neonatal death
- there is no evidence that the virus crosses the placenta from mother to baby ^[6]
- there is no indication for elective cesarean section in infected women
- there is a risk of fetal distress in labor, and continuous fetal heart monitoring is recommended
- there is no evidence that the virus is present in breast milk.

Each maternity hospital should prepare a care pathway for the management of suspected or confirmed cases that ensures appropriate obstetric care at delivery.

Nasopharyngeal swabs of pregnant woman should be performed in accordance with regional protocols. Testing of all pregnant women admitted for spontaneous or induced deliveries is a possibility that should be discussed. The use of nasopharyngeal swabs for RT-PCR-based detection of the infection, associated with clinical evaluation of symptoms possibly due to COVID-19, will allow deliveries to be split between two different wards: women can therefore be delivered either in a normal delivery room or in a COVID room where specific precautions must be taken.

Nevertheless, many other questions remain unanswered such as whether to temporarily separate infected mothers and their newborns, and whether it is safe for infected women to breastfeed. The literature is still divided on the topic of breastfeeding. However, because of the numerous benefits of breastfeeding (in particular, the transmission of antibodies), it may possibly be suggested that the newborn could stay in the COVID room with its mother and breastfeeding be allowed, provided specific hygiene precautions are followed in order to avoid, as far as possible, exposing the neonate to the risk of infection.

COVID-19 infection carries a risk of SARS and death, but these outcomes occur more frequently in men older than 50 years. In view of this, we venture to hope that young pregnant women will not be severely affected by this new virus and that newborns will not be secondarily infected.

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