Amendment to:

«Empfehlungen SGGG gynécologie suisse: Coronavirusinfektion COVID-19, Schwangerschaft und Geburt»

(Version dated 17.4.2020)

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This amendment to the recommendation letter of SGGG should reflect on the one hand the highly dynamic situation, on the other hand it should give a useful overview about recommendations in Switzerland for clinical practice.

However, these recommendations should clearly take into account local guidelines and the impact of significant differences in supply, especially for Personal Protective Equipment (PPE).

This amendment summarizes the expert opinion of members of the AFMM and SGUMGG about important antepartum, intrapartum and postpartum considerations.

The term "COVID-19 +" is used for patients who have tested positive for an infection with SARS-Cov-2, or who are experiencing the clinical symptoms of the disease but whose test result for SARS-Cov-2 is not yet available.

Essential antepartum issues

Before entering the clinic or office, every patient should be screened by being asked about clinical symptoms that may also include atypical symptoms, such as anosmia, ageusia and diarrhea and, if possible, by measuring the patient's temperature. Furthermore, the oxygen saturation (SpO2) may also serve as an additional screening tool.

Some centers and offices send a text message, or a person of the team calls the patient 24 hours before the appointment to remind her that only patients without any symptoms should attend the examinations.

If the risk is low, certain antenatal consultations via phone call (or videoconference) may be considered. This approach may also help to reduce the number of consultations in the low risk group, whereas no reduction in the number of consultations is recommended in patients at risk.

Currently, in several parts of Switzerland, private gynecologists perform pregnancy checkups up to term

to reduce the workload in the obstetric outpatient units of hospitals.

During the antenatal checkup and during ultrasound examinations, the examiner should wear personal protective equipment, preferably surgical masks, or FFP2 masks if there is a risk of aerosols. It would be useful for every patient to also wear a mask. However, this consideration is currently hampered by the insufficient supply and stock in all parts of Switzerland. During an ultrasound examination gloves should also be worn in addition to a mask.

If a patient is COVID-19 positive, then the patient should be transferred to a dedicated area, while wearing an obligatory surgical mask. The same procedure should be performed in patients with clinical symptoms. Importantly, these pregnant patients must be screened for SARS-CoV-2 as soon as possible.

In case of a COVID-19 patient, medically indicated ultrasound examinations should be performed in a dedicated room. If possible, windows and doors should be opened after the examination. Enough time (30-60 minutes) should be left to allow the room to be cleaned between two patients.

In general, only two ultrasound examinations during pregnancy (first and second trimester screening) are currently recommended in low-risk women by the SGUMGG and paid for by the insurance companies (according to KVG). Additional examinations in these women must be medically indicated. Up to now, and even during this pandemic period, non-invasive prenatal testing (NIPT) is only reimbursed if an elevated risk after the first trimester screening above 1:1000 exists.

In general, testing during the first trimester and second trimester is essential and must be offered to all pregnant women. This allows each pregnancy to be classified into the low or high-risk group at around 12 weeks.

If the patient is COVID-19 positive, a scheduled ultrasound examination should be postponed if it can be done correctly later. If this is not the case, in-depth counselling on the subsequent course of action should be provided.

Invasive procedures, such as amniocentesis or chorionic villus sampling should be performed only when medically indicated. Postponing an invasive procedure is recommended if clinical symptoms are present, such as fever or cough. If an invasive procedure is indicated in a COVID-19 patient, the disinfection should not be performed with chlorhexidine alone, but with an alcoholic solution (e.g. ethanol 62-71%) to effectively destroy the virus. It is currently not known whether an invasive procedure in COVID-19 pregnant women can transfer the virus to the fetus, and if so, whether this could affect the fetus or the pregnancy, although this risk seems low. Patients must be informed about this before performing the procedure.

The current data do not show an elevated risk of healthy pregnant women becoming infected with COVID-

19, or experiencing a more severe course of the disease, compared to non-pregnant women.

Medical treatment during pregnancy - important considerations

If there is a high risk of preterm delivery, fetal lung maturation by administration of betamethasone or dexamethasone should be considered between 24 and 34 weeks of gestation, depending on the obstetric factors. However, in COVID-19 patients with severe pneumonia, lung maturation must be discussed and decided together with an infectiologist / pulmonologist and the neonatologist.

The treatment with magnesium sulfate should be performed according to the current national guidelines without a restriction.

In patients taking low-dose aspirin, this should be discontinued in the acute phase due to the COVID-19 associated thrombocytopenia. Afterwards the patient can resume the aspirin depending on gestational age and platelet count.

Advice for intrapartum care

The Swiss Federal Office of Public Health (FOPH) does not consider delivery as an aerosol-producing event. Nevertheless, the expert opinion recommends FFP2 masks if available for COVID-19 women and for those with symptoms that are highly suggestive of the disease. In general, attendance at the delivery of a COVID-19 women should be limited to a quorum of senior staff members (obstetrician and midwife).

In case of an emergency cesarean section (<10 min) under general anesthesia, the anesthetist and all operating room personnel should wear a FFP2 mask to reduce the risk of an infection during intubation, a highly aerosol-producing process.

The need to don essential protective clothing, even during an emergency section, can prolong the interval between decision and delivery. The patient must be informed accordingly. Early epidural anesthesia is recommended for COVID-19+ pregnant women.

There is a broad consensus in Switzerland that the partners can stay in the delivery room and attend the delivery. On the other hand, the attendance of the partner in the operation room during a C-section depends on each hospital's policy.

During delivery, there exists no consensus on whether the second stage of labor should be restricted, to prevent dyspnea in the mother. However, an individual approach is recommended, taking the individual

symptoms into account.

It is important to note that COVID-19 is not an indication for a cesarean section unless the patient is critically ill and unstable.

After delivery, there exists no consistent practice regarding the collection of umbilical cord blood, placental tissue or amniotic fluid: Some centers collect part of the aforementioned material. There is a consensus to send the placenta to the pathology department for further examination and, whenever possible, to store umbilical cord blood for future examination.
If possible, a COVID-19+ pregnant woman should be enrolled in the COVI-Preg cohort study (https://www.chuv.ch/fr/dfme/dfme-home/recherche/femme-mere/materno-fetal-and-obstetrics-research-unit-prof-baud/covi-preg/).

There is also no consensus regarding newborn testing. However, most of the centers do not test healthy newborns.

Postpartum issues

There is a consensus that the newborn may remain in the dedicated, isolated room of the mother. The mother is allowed to breastfeed. However, she needs to take precautions into account, such as wearing a mask during breastfeeding, hand hygiene and distancing.

To further reduce the risk of an infection and to protect health care workers and other patients in the hospital, postpartum visits should be avoided or restricted to partners without clinical symptoms for a limited visiting time.

Covid-19+ patients have a higher thromboembolic risk, which is further increased by the pregnancy and postpartum situation. Consequently, thromboembolic prophylaxis should be provided on an interdisciplinary basis for Covid-19+ patients during the pregnancy and postpartum.

Regarding the length of postpartum hospital stay, there exists no stringent approach in Switzerland. However, there exists a consensus between the experts: If a COVID-19 patient is asymptomatic, she should leave the clinic as soon as medically feasible when the outpatient follow-up by midwives and pediatricians has been arranged.

If clinical symptoms are present, an individual approach according to the severity of COVID-19 should be adopted, taking into account the possibility of an acute pulmonary deterioration from days 5-10.

Final remark

As written in the recommendation of the SGGG gynécologie Suisse: Coronavirusinfektion COVID-19, Schwangerschaft und Geburt:

Due to the highly dynamic situation of the COVID-19 pandemic and limited data with regard to the antenatal, intrapartum and postpartum management and practice, these current expert recommendations may change rapidly.