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Editorial

Pregnancy Treatment in Covid-19 Pandemic: General Considerations

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Editorial

The recent COVID-19 pandemic turned the obstetric scientific community on alert, since the information available during pregnancy is still limited [1]. Chinese data seems to demonstrate that symptoms during pregnancy would be similar to those of general population - fever, cough, dyspnoea, and asthenia. It is important to note that most of time; the symptoms (when present) will be mild and similar to "flu" [2].

The severity of cases is linked to serious respiratory impairment, once pregnant women have decreased residual pulmonary capacity, with a dropping "reserve" and increased rate of oxygen consumption, which generates tendency to hypoxia [2].

In fact, there is no specific treatment for COVID-19. Proposed treatments are being analysed over the days. The main action is clinical support during pregnancy. Antibiotics are indicated in cases when secondary bacterial infection involvement is suspected or confirmed, or even when it cannot be ruled out.

Antibiotic protocols proposed for treating pneumonia in pregnancy classically include the use of beta lactams (3rd generation cephalosporin) with association of a macrolide (clarithromycin or azithromycin). This can be scaled according to the patient's clinical situation and antibiogram [3]. The use of Oseltamivir 75mg is also indicated for all cases of flu syndrome in all risk populations, such as pregnant women [3].

Hydroxychloroquine is an approved medication for malaria treatment and rheumatological disorders and is also approved in pregnancy. Initial studies have shown a possible action of this medication against COVID-19, but its use is being classified by societies of infectious diseases as "experimental rescue", therefore, must be restricted to critically ill patients within clinical protocols approved by ethics committees. Its routine or prophylactic use in just confirmed cases is not recommended [4-6].

Fluids infusion is an integral part of treatment for sepsis, especially when hypotension (systolic blood pressure <90) or hypo perfusion is present. The Sepse Surviving Campaign recommends an initial bolus of 30ml/Kg, which in pregnancy can be "too much" because of the reduction in colloid osmotic pressure and the tendency to leak into the third space, worsening ventilator parameters. It seems reasonable to infuse 1-2 litres of crystalloid solution in septic and hypotensive pregnant women. In addition, only half of septic patients are "fluid responders" - justifying conservative fluid management [7].

If patient remains hypotensive (medium arterial pressure less than 60mmHg) despite volume resuscitation, the use of vasopressors is indicated. In pregnancy, noradrenaline is the vasopressor of choice and its use should not be delayed [7].

Fetal gas exchange depends on two variables - maternal $PaO_2/PaCO_2$ and utero-placental flow. Our efforts should focus on maintaining a maternal PaO_2> 70mmHg, which would be equivalent to a saturation ≥ 95% and sufficient for adequate fetal oxygenation. The gasometry of a pregnant woman usually presents changes secondary to the increase in tidal volume - pH 7.40-7.47 (tendency to respiratory alkalosis) due to a drop in maternal PCO_2 around 30mmHg. The drop in maternal PCO2 and the maintenance of placental uterine flow are the main responsible for fetal CO_2 clearance [7].

The concept of fetal viability is the gestational age which the new-born has more than 50% chance of survival and at least 50% of the survivors present no severe long-term squeal. Below fetal viability (24 to 26 weeks) only fetal beats auscultation may suffice. After this period, more detailed evaluation using ultrasound and Doppler is desirable, with frequency of revaluation depending on fetal maternal condition [8].

COVID 19 infection is not an isolated indication for early delivery. Delivery may be necessary in those patients with progressive clinical worsening. The route must follow obstetric indications, since there is no evidence until this moment of caesarean section benefit in women with COVID infection19. This may be necessary in critically ill patients, especially those on mechanical ventilation [2]. Between 24 - 26 weeks to 34 weeks, if delivery is necessary, consider the possibility of corticotherapy and magnesium sulphate infusion for fetal neuroprotection [2].

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Conflict of Interest

Authors declare no conflict of interest.

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