Dear Editor,

The issue of maternal intrapartum infections requires special attention, since if they are not diagnosed or not properly managed, they can give rise to major complications such as sepsis, maternal death or disability and increase the likelihood of early neonatal infection and other adverse outcomes. Sepsis has in fact been reported to determine a mortality risk ranging from 1.8% to 17.6% and increases to 28-33% in the case of septic shock. It is necessary to take into account whether the pregnancy was natural or achieved through medically assisted procreation (MAP) techniques, in couples with fertility issues due to male and/or female factors. In fact, in addition to the infectious risk to which each pregnancy is exposed both throughout gestation and in particular in the peripartum, MAP pregnancies may entail a higher risk of gestational hypertension and/or abnormalities of placental insertion for which specific therapies for preeclampsia and peripartum haemorrhage may be required. At any rate, regardless of the type of conception and the risks related to it, pregnancy is associated with a shift of the immune system from an inflammatory state that would contribute to the rejection of the fetus, towards an anti-inflammatory immunological state, which on the contrary fosters the passive transition of maternal antibodies to the fetus. However, pregnant women should not be considered immunosuppressed: their immune system is in fact biased towards an anti-inflammatory phenotype that influences both the outcome of pregnancy and the pathogenesis of some diseases. Such changes have been found to play a role in the maternal response to infections.

In genetically predisposed women there can be an abnormal activation of the pro-inflammatory mediator system with consequent hemodynamic alterations that can cause amniotic fluid embolism, a rare but serious obstetric emergency. In this regard, particular attention must be paid to the method of delivery and the possible risk of peripartum infections that follow. Today there is a growing demand for a more physiological birthing experience, such as through water birth. Although water immersion in the first stage of labor is generally considered to be a safe and cost-effective method of pain management in women in labor, many concerns remain about the safety of conducting the second stage of labor and the water birth as well, especially for neonatal risks and medico-legal implications. Scientific research data have reported several serious adverse outcomes among infants born via waterbirth, including breathing problems (including the possibility of drowning in fresh water), rupture of the umbilical cord with bleeding, and water-borne infections. Cases of major infections with Pseudomonas aeruginosa and Legionella pneumophila have also been reported. Another noteworthy condition linked to the peripartum infectious risk is the premature rupture of the membranes that can be associated with fluid getting tainted by meconium; such an outcome could make it necessary to expedite the delivery in order to minimize the adverse neonatal outcomes for which it is found in clinical practice to perform pressure maneuvers on the bottom of the uterus such as the Kristeller maneuver with major complications including uterine rupture or using tools such as forceps and the kiwi sucker. In some cases, it is necessary to perform an episiotomy to facilitate the passage of the fetus through the birth canal, since at the end of the expulsive period there is a risk that...

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the perineum will tear during child's birth; a surgical cut can help to prevent this from happening, allowing better healing of the tissues. Currently available findings show that especially in the case of first childbirth, the risk of suffering serious injuries to the rectum and the levator ani muscles is higher in the case of traumatic laceration, although episiotomy is still a very controversial procedure24.

In addition, in these cases it may be helpful to make a diagnosis of fetal position through intrapartum ultrasound, especially in nulliparous and in childbirth analgesia, also in order to reduce possible cases of malpractice and litigation25-27. In light of the high rates of litigation to which obstetricians and gynecologists are exposed28,29, the need for clean-cut, broadly shared guidelines could greatly contribute to reducing malpractice lawsuits and mitigating the alarming push towards preventive medicine practices by obstetricians and gynecologist30-32. Peripartum often requires decisions to be made in the very short term, hence a greater degree of objectivity and clarity in the decision-making process is of utmost importance to ensure that patients can benefit of evidence-based care grounded in solid scientific consensus. This way, professionals can act out of conscience without the fear of being held liable for their actions in case of adverse outcomes. The recently issued European guidelines on perinatal care go in that direction, as they address the already mentioned practice of episiotomy, a legally and clinically controversial procedure33. Just as importantly, the patients' mental health during peripartum cannot be overlooked, as such a crucial aspect is likely to influence outcomes in a major way, as stressed by new guidelines issued last September by the World Health Organization (WHO)34. Such legislative and regulatory adjustments aimed at a greater degree of harmonization are even more important now, as healthcare systems have been put under tremendous strain by the COVID-19 pandemic and further economic difficulties are likely to be in the offing. Optimizing the allocation of resources and helping professional uphold the patients’ rights to timely and reliable healthcare will, therefore, be vital, as budget cuts put universal healthcare to the test, and more people lose their financial ability to pay healthcare costs due to the economic crisis.

Conflict of Interest
The Authors declare that they have no conflict of interests.

References


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