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Noninvasive ventilation in H1N1-correlated severe ARDS in a pregnant woman: please, be cautious!

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Dear Editor,

We read with great interest the report of Djibrè et al. [1] on a pregnant woman with H1N1-correlated severe acute respiratory distress syndrome (ARDS) successfully treated with noninvasive ventilation (NIV). We agree that a trial of NIV can be attempted in most cases of acute respiratory failure [2], in particular when the patient is admitted in the ICU; nevertheless, in our opinion the reported case was unfit for a prolonged NIV treatment. The positive outcome was likely due to the high expertise of the authors, but generalization of their decision to avoid tracheal intubation in such critical conditions should be discouraged as too hazardous.

The pregnant woman presented with severe ARDS (PaO_2/FiO_2 ratio <100), and NIV is commonly contraindicated in this condition [3] (above all in the absence of any contraindication to tracheal intubation). Even if the best ventilatory parameters to treat ARDS are still a matter of debate, the authors applied for 72 h a maximal FiO_2/minimal PEEP strategy that is very far from standard ARDS treatment. Furthermore, when the patient worsened requiring intermittent NIV after a temporary improvement, bronchoalveolar lavage, transports to perform two CT scans, and caesarean section were performed still avoiding preventive tracheal intubation. We believe that a prudential, elective tracheal intubation, best if preceded by NIV to preoxygenate the patient [4], was indicated by the risk of acute deterioration associated with those maneuvers and by the extremely high risk of severe hypoxia in case of emergent tracheal intubation in an ARDS patient (in particular outside the ICU), aggravated by the potential difficult airway management in pregnant women.

The risk of consequences for the fetus was another crucial reason to perform a preventive tracheal intubation. The authors reported that fetal monitoring was always satisfactory, and the infant was in good health; while we congratulate the authors for the successful management, we feel that the fetus was at very high (preventable) risk of permanent consequences in case of maternal sudden deterioration [5].

During a recent influenza A pandemic, pregnant women were shown to be at a relatively high risk of ARDS, and the possibility of future (or even imminent) viral pandemia with analogous characteristics exists. We strongly suggest a more prudential approach to ventilatory support in pregnant women with severe ARDS, preferring elective tracheal intubation whenever emergent intubation could have devastating consequences for the mother and the fetus and to allow a protective ventilatory strategy.

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