Author's response to reviews

Title: A twin pregnancy with acute respiratory failure due to non-fatal amniotic fluid embolism. A step-by-step diagnosis of exclusion: A case report

Authors:

Vasilios Papaioannou (papabil69@vodafone.net.gr)
Christos Dragoumanis (christosdragoumanis@gmail.com)
Vassiliki Theodorou (vassiliki.theodorou@gmail.com)
Dimitrios Konstandonis (drkonst@in.gr)
Ioannis Pneumatikos (ipnevmat@med.duth.gr)

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Author's response to reviews: see over
Answers to comments of Reviewer Panagiotis Peitsidis

Reviewer’s comment: Reference about Clark's criteria for Amniotic fluid embolism in the beginning of discussion

Check the following manuscript


Author’s response: We referenced about Clark's criteria for Amniotic fluid embolism in the beginning of discussion.

Reviewer’s comment: Did the patient receive any inotrope agents? If yes name them and in what dose were they administered?

Author’s response: Our patient received noradrenaline infusion in small infusion rete (2µg/min) for 1 1/2h immediately after ICU admission during initial resuscitation. We added a relevant sentence in the manuscript.

Reviewer’s comment: What was the Apgar score of the Infants? Did they have any neurological sequellae?

Author’s response: The Apgar score of both infants was 9 at 1 min and 10 at 5 min, they were in good neurological status. We added the Apgar score in the text.
Reviewer’s comment: Some small grammatical errors are present.

Author’s response: We check the text and correct the grammatical errors.

Responses to comments of Reviewer Christian Lycke Ellingsen

Reviewer’s comment: In recent, larger studies (e.g. the study reported by Kramer et al in Lancet 2006; 368:1444-48) it is convincingly shown that the fatality rate is much lower than previously estimated, as low as 13%. In several papers, there is a trend suggesting the higher the reported incidence is, the lower is the fatality, probably due to publication bias. There is also a tendency (albeit not always significant) towards increased risk for developing AFE in elderly primigravida, multipara and by intrumental delivery. This lady had all these risk factors.

Authors’ response: We added a sentence in the discussion citing the findings of Kramer et al

Reviewer’s comment: The pathophysiology of AFE is not completely understood. As most authors now have abandoned the hypothesis that AFE is caused by mechanical obstruction of the pulmonary vessels, I would suggest that the authors mention alternative explanations relating to biologically active substances in the amniotic fluid (tissue factor, endothelin, histamin, prostaglandins, complement activation...).

Authors’ response: We replaced the sentences “There are a number of theories as to how the amniotic fluid exerts its influence on the circulation. It seems that initially AFE causes a mechanical obstruction with pulmonary hypertension, decreased left sided filling and subsequently, systemic hypotension. This obstruction can lead also to V/Q mismatch with resultant hypoxaemia. Treatment consists of adequate oxygenation and haemodynamic support with fluids and inotropes. With “The pathophysiology of AFE is not completely understood. Although AFE in the past was attributed to mechanical obstruction of the pulmonary vessels by amniotic fluid, at present the endothelial injury from biologically active substances in the
amniotic fluid (tissue factor, endothelin, histamin, prostaglandins, complement activation) seems more possible explanation for the pathogenesis of AFE† to highline the change of the perceptions about the pathogenesis of AFE.

*Reviewer’s comment:* I think that many of the international readers would prefer that the results of the blood gas analysis was reported in SI units (kPa) instead of mmHg.

*Authors’ response:* We convert the results of the blood gas analysis in SI units.

*Reviewer’s comment:* Concerning the coagulopathy, it would be interesting to know if the level of fibrin degradation products was measured (D-dimer test).

*Authors’ response:* fibrinogen level was 140mg

Normal range for fibrinogen 200 –400 mg/dL.

*Reviewer’s comment:* Some odds and ends:

*Reviewer’s comment:* The authors state that dyspnoea is a common symptom during late pregnancy. I suggest that the sentence should start "Mild dyspnoea is a common symptom..."

*Authors’ response:* We follow the reviewer’s suggestion.

*Reviewer’s comment:* It is stated that "CT scanning confirmed the above findings...", "supported" is perhaps a better word.

*Authors’ response:* We follow the reviewer’s suggestion.

*Reviewer’s comment:* I feel that "Duplex scanning" could be more precisely mentioned as "Duplex ultrasound scanning".

*Authors’ response:* We follow the reviewer’s suggestion.
Reviewer’s comment: On page 7: “AFE appears to be initiated after maternal intravascular exposure to fetal tissues and usually occurs during pregnancy...” The authors surely mean "during labor".

Authors’ response: We follow the reviewer’s suggestion.

Reviewer’s comment: There are some minor grammatical errors that should be corrected in the final proof-reading. (There at least three different spellings of "caesarean").

Authors’ response: Text was checked for grammatical errors.