Amniotic fluid embolism

To the Editor:

I was interested to read the clinical report by Davies titled 'Amniotic fluid embolism and isolated disseminated intravascular coagulation'.¹ The author concludes that the diagnosis of amniotic fluid embolism was 'primarily clinical and one of exclusion'. However, from personal experience of managing a survivor case of amniotic fluid embolism, I would suggest that in the setting of gravid hysterectomy the histopathologist can often confirm the diagnosis.

The postmortem diagnosis of an amniotic fluid embolism is made by demonstration of amniotic fluid debris in the pulmonary vasculature. The same findings in the blood vessels of the uterus and in particular the cervix² also confirm the diagnosis in survivors.

The diagnosis can also be made by cytological examination of blood from central venous or pulmonary catheterization.³ However, the presence of squames alone is not pathognomonic⁴ but often the result of contamination.

Several other diagnostic methods are described in the literature. One example is measurement of maternal plasma zinc coproporphyrin.⁵ This is a component of meconium.

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REPLY:

Although several diagnostic tests have been suggested, at the present time there is no routine diagnostic scheme that will easily and reliably confirm the presence of an amniotic fluid embolus (AFE) in suspected cases. Part of the difficulty is that clinical availability and experience with some of the more recent tests is lacking. In regards to the presence of fetal debris in the maternal vasculature, either centrally or peripherally, I agree with Dr. Bannister that such a finding is highly supportive of the diagnosis and clinicians should be encouraged to seek such evidence. Unfortunately, partly because of a lack of communication between pathologists and clinicians, the required sampling is not always done or the appropriate stains are not utilized.¹ Moreover, since amniotic fluid embolus is presently considered to be a whole spectrum of disease ranging from a subclinical entity to one that is rapidly fatal, obtaining central access may not always be clinically indicated or feasible. In those cases where pulmonary artery catheterization is obtained, contamination of the sample by maternal cells can be minimized by utilizing the method suggested by Masson.² The demonstration of fetal debris in such a sample is highly significant and consistent with the diagnosis. However, it is important to remember that although such a finding is supportive, it is not necessary for the diagnosis. Until simple, less invasive methods of confirming the diagnosis are validated and become readily available, the diagnosis remains one of exclusion, based on a compatible clinical presentation and careful elimination of all other diagnostic possibilities.

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Perioperative core temperature

To the Editor:

Kamitani *et al.*,¹ in their study on perioperative core temperature, are to be congratulated on preventing core hypothermia and thus the potential complications i.e. myocardial ischemia; shivering; impaired wound healing, immunity and coagulation; prolonged hospital stay.