



Coroner M E Hassell
Senior Coroner
Inner North London
St Pancras Coroner's Court
Camley Street
LONDON
N1C 4PP

7 March 2017

Dear Coroner Hassell,

Re: Prevention of Future Deaths following Amniocentesis

Thank you for your letter dated 9 January 2016. In this you describe the death of a lady, Ana Geanina Sirghi-Marin, 2 days after an amniocentesis, during which the liquor was noted to be discoloured dark yellow but no action taken in response to this unusual appearance. The liquor was not purulent nor blood stained. You have recorded a medical cause of death of:

- 1a E-coli sepsis
- 1b Chorioamnionitis
- 1c Second Trimester Pregnancy

Subsequently, E-coli was grown from the amniotic fluid, indicating that the infection predated the amniocentesis.

You have suggested a wise precaution in future cases – namely to send samples of non-blood stained discoloured amniotic fluid off for culture and quickly to follow-up the result. Although this may not have prevented the death in this case, in other cases it may do so.

We note that you have not suggested that antibiotics might also have been administered in this case. Having read your summary, we think that this should also have been a consideration. Again, whilst it may not have prevented the maternal death, it might do so in future cases.

Current guidelines on amniocentesis were published in 2010¹ and are due for a renewal. The risk of severe sepsis, including maternal death, is described with a risk < 1/1000 procedures quoted. Whilst emphasis is given to reducing skin contaminants or organisms present on the ultrasound probe and gel by decontamination of probes between patients, and following standard practice to avoid inadvertent puncture of the bowel, no discussion is made on the issue of the finding of discoloured or, for that matter, purulent fluid at amniocentesis. Similarly, the guideline does not mention whether prophylactic antibiotics are justified in all, or in special circumstances and if not, why not.

We have discussed your recommendations with the joint chair of the Royal College of Obstetricians & Gynaecologists' Guidelines Committee.

They have informed us that the Coroner's recommendations will be taken into consideration when the next revision of the Green-top guideline is issued, but in order to bring this matter to the attention of specialists performing amniocentesis more quickly, we would recommend that the Royal College of Obstetricians and Gynaecologists consider adding a prominent notice on their website (in particular on the page featuring the guideline for amniocentesis) encouraging doctors to consider sending



amniotic fluid for bacteriological examination as the Coroner has suggested, with consideration of antibiotic treatment if there is evidence of intra-amniotic infection. We suggest the wording of this notice should read:

“If, on inspection of the amniotic fluid following amniocentesis, it has a cloudy or purulent appearance or the patient shows clinical features to suggest intra-amniotic infection, the operator should consider sending a small quantity of amniotic fluid for microbiological analysis and consider antibiotic treatment”.

We hope that the above action is a satisfactory and appropriate response to the findings of your inquest.

Yours sincerely

[Redacted signature block]

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On behalf of the British Maternal & Fetal Medicine Society

RERERENCES

1. RCOG. Amniocentesis and Chorionic Villus Sampling. 2010; Green-top Guideline No 8.