

Questions and Answers session – 13th August 2020

Please note that the following text is not an accurate reproduction of the minutes of the online session. They have been extensively edited to make it more informative and useful to readers.

Can you calculate incidence in this study design?

It is not clear how they calculated the incidence rates unless they presented data on the number of pregnant women in each of these registered hospitals and the number admitted for appendicitis. It is presumed that they did not have this data so it remains unclear how the incidence rates were calculated.

What are the pitfalls of this study using nationwide data rather than focussing in one hospital?

The study is limited by looking at coding alone because this does not allow the severity of infection etc to be considered. Looking at coded maternal deaths does not allow for the cause of death to be appreciated, the patient may have died due to appendicitis (and complications of this) or another unrelated cause such as a car crash. In addition to this, there is a huge variability in the management of appendicitis between hospitals and this cannot be taken into account in a big database

Why was cardiac arrest monitored?

Cardiac arrest is a reasonably well recognised bad outcome in pregnancy care. It is also easily coded.

Why isn't this a cohort study?

The exposure and outcome are reviewed at one point in time. They are looked at retrospectively which fits well into the category of a cross sectional study. In a cohort you would follow up the patients but this does not occur in this case.

Why is there a worldwide downward trend in the diagnosis of appendicitis?

Diagnostic tools allow us to eliminate appendicitis as a differential on imaging. The imaging allows alternative causes of abdominal pain to be identified and then less surgery is being done.

What do the results of the study mean for the average surgeon?

The results of the study are not particularly significant to surgical practice because the study does not aim to answer a particular question which is relevant to surgeons. Perhaps the point of this study is to stimulate thinking about managing pregnant patients with appendicitis. There are obvious discrepancies between mortality and cardiac arrest rates in different ethnicities so this is probably worth looking at.