



Clostridium sordellii infection and medical abortion

Information for the FIAPAC members by
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The recently reported death case from Portugal is terrible news and everything possible needs to be done to prevent such an event from happening again.

http://registration.akm.ch/einsicht.php?XNABSTRACT_ID=124927&XNSPRACHE_ID=2&XNKONGRESS_ID=136&XNMASKEN_ID=900

Therefore we need to discuss the facts in a transparent manner. Following please find some of the currently available evidence.

This is the first known case of *C. sordellii* death following medical abortion occurring in Europe. There is good reason to assume that there has never been any case in Europe before because it would have been reported. Medical abortion is done under close supervision and gets a lot of public attention. It is very unlikely that a death case after medical abortion would have gone unrecognized.

In North America (US and Canada) there have been several similar cases reported after medical abortions since 2000. (nine cases until 2010, in other words the rate of fatal *Clostridium sordellii* and *C. perfringens* infections in the US is 0.58 per 100,000 medical abortions)

The US health authorities, the CDC and the FDA have investigated very thoroughly the few cases of *Clostridium sordellii* infection that had occurred in Obstetrics and other fields of medicine. In May 2006 they even organised a special meeting dedicated to this aspect:

<http://www.fda.gov/downloads/AboutFDA/CentersOffices/CDER/UCM183030.pdf>

During that meeting it appeared that infections with *C. sordellii* are extremely rare and therefore did not get much attention, until they occurred in patients who underwent a medical abortion. However no casual relationship with medical abortion could be found. It was also discussed whether the vaginal application has played a role. But there was no evidence for it. This was later confirmed by the last *Clostridium sordellii* infection which occurred in a woman who had taken misoprostol buccally. Furthermore other prostaglandins and medicaments are routinely administered vaginally for a variety of indications without an increased risk of infection.

Cases of *Clostridium sordellii* infection have previously been diagnosed after delivery of live-born infants, spontaneous abortion, trauma or surgery and in intra venous drug users.

Clostridium sordellii is a toxin producing bacteria. The patients got a local infection and the toxin is then spread over the whole body. Patients suffer and die from the effects of the toxin. Antibiotic treatment or even removing the organ containing the local infection (for example the uterus) does not remove the toxins from the body of the patient and has therefore little effect for the course of the illness. Please find more information in the fact sheet on *Clostridium Sordellii* by the CDC:

<http://www.cdc.gov/HAI/organisms/cSordellii.html>

and a presentation on and the information provided by the FDA:

<http://www.fda.gov/downloads/AboutFDA/CentersOffices/CDER/UCM183774.pdf>

It is unclear whether or how the already very low frequency of *Clostridium sordellii* infection can be further reduced. For example prophylactic antibiotics has been proposed. But it remains unclear what the effect and side effects of such a preventive measure would be.

In the US the Planned Parenthood Federation has decided to give every woman antibiotic (doxycycline) prophylaxis in medical abortion. But probably we will never know whether or not this is a useful intervention. Because *clostridium* septic shock is so rare that it is almost impossible to evaluate the usefulness of such an intervention. The WHO guidance on safe abortion does not recommend antibiotic prophylaxis in medical abortion.

Conclusion

All available evidence shows that infections (some of them fatal) with *Clostridium sordellii* are very rare

and do occur in different situations: after delivery of live-born infants, spontaneous or induced abortion, trauma or surgery and in intravenous drug users. These cases did not get much attention so far, partly because they are so rare. In fact these cases only came to the attention of health professionals when the first case occurred in relation to medical abortion. Because abortions are closely observed due to the public interest. So far no specific risk factor could be found for infections with *Clostridium sordellii*.

Taking the recent most tragic case into consideration, medical abortion remains a very safe procedure compared to surgical abortion but more so compared to carrying a pregnancy to term and also compared to other surgical interventions. The procedure has been very thoroughly evaluated since its introduction in 1988 and millions of patients have been treated and closely observed.

Nevertheless efforts undertaken to further improve the method.

References:

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