Canterbury District Health Board
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Clinical Pharmacology Bulletin

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Vulvovaginitis during pregnancy and breastfeeding

Vulvovaginitis is a common infection with potentially serious consequences during pregnancy. This bulletin discusses the risk and benefits of treatment of vulvovaginitis during pregnancy and breastfeeding.

Risks during pregnancy

The most common cause of vulvovaginitis is Candida, which is not associated with specific risks during pregnancy. Bacterial vaginosis is caused by anaerobic bacteria such as Gardnerella vaginalis, but half of the women who meet the diagnostic criteria for bacterial vaginosis are asymptomatic. The likelihood of adverse consequences during pregnancy appears to vary and it remains controversial whether asymptomatic pregnant women should be screened routinely for the condition. Pregnant women with Trichomonal vaginitis may be at increased risk of premature or prolonged rupture of membranes, premature labour, low-birth-weight babies and post-abortion infection.

Drug treatment when pregnancy

Candida: There are a variety of topical treatments, which appear to be equally effective. Topical preparations such as clotrimazole or nystatin vaginal creams or pessaries are safe in pregnancy with cure rates of ~90%. Pregnant women may require longer treatment and may be more likely to have recurrent symptoms. However systemic therapy such as oral fluconazole should be delayed if possible until the post-natal period in most patients, due to risk of fetal toxicity.

Bacterial vaginoses: Treatment with oral metronidazole has cure rates of ~85% for single 2g doses and ~95% for 400mg twice daily dosing for 5 days. However, the safety of metronidazole in the first trimester of pregnancy is controversial, as in animal studies it is mutagenic. The human literature does not support this concern. However, it seems prudent to use 'safer' alternatives where possible. Amoxicillin/clavulanic acid and cephalosporins are effective alternative therapies with cure rates ~ 85%. Both are considered safe in pregnancy, including during the first trimester.

Trichomonal vaginitis: Treatment with metronidazole provides a cure rate of ~95%. As discussed above, where possible we would recommend 'safer' alternatives during pregnancy. Unfortunately there is no effective alternative treatment with better safety data than metronidazole. If not considered urgent (for example, in asymptomatic women), treatment could be delayed until after the first trimester. Given the possible risks associated with trichomonal vaginitis during pregnancy, metronidazole is reasonable after the first trimester for asymptomatic infection, and during all stages of pregnancy for severe, symptomatic disease.

Risks during breastfeeding

The medicines used to treat vaginal infections may be ingested by the infant via breast milk, potentially causing adverse effects. Some drugs transfer in very small amounts and can be used safely. If a drug transfers in large amounts the risk to the infant is increased. To estimate the infant risk, the dose ingested via breastmilk and the mothers dose (both adjusted for weight) can be used to calculate a relative infant dose. Where the relative infant dose is <10%, maternal drug use is considered safe for the breastfed infant. There are methods that minimise infant exposure to drugs via breast milk, such as feeding before the dose, planning daily doses at the beginning of the longest interval between feeds (eg: overnight) and withholding breastfeeding for a short time. However, these measures may not be appropriate in all situations and particular care should be taken when selecting drug therapy for mothers who are breastfeeding very young and/or premature infants. The risk and benefit of treatment and continuing to breastfeed must be weighed in each case.

Drug treatment when breastfeeding

Candida: Topical vaginal preparations are safe during breastfeeding and should be used first line. If several topical treatments have been tried and oral therapy is required, a single dose of fluconazole 150mg is the treatment of choice despite transfer into breast milk in significant amounts (relative infant dose ~ 16%). Feeding just prior to a dose and other measures to minimise infant exposure are recommended.

Bacterial vaginoses: Amoxicillin/clavulanic acid is compatible with breastfeeding as drug transfer is low (relative infant dose < 1%). Clindamycin may be slightly more effective in the treatment of bacterial vaginosis, but it transfers into breast milk in greater quantities (relative infant dose up to 6%). The transfer is small enough to be considered safe for most infants, so clindamycin is reasonable as second-line therapy.

Trichomonal vaginitis: Metronidazole transfers into breast milk in relatively large amounts (relative infant dose up to 36%). It is also reported to make the breast milk taste bitter. If using a stat 2gm dose, suggest breastfeeding just prior to the dose to minimise infant exposure. Consider expressing breast milk prior to the dose to give via a bottle after the dose, withholding breastfeeding temporarily (~24 hours).

Contact Christchurch Drug Information (ph 364 0900) to discuss drug use in pregnancy and breastfeeding.