

DRUG INFORMATION

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SAFETY OF MICONAZOLE IN PREGNANCY

Question:

What is the safety of using topical miconazole to treat an interdigital fungal infection in a woman who is 20 weeks pregnant?

Answer:

Very little miconazole reaches the systemic circulation following topical application of a 2% cream (which contains 20mg miconazole per gram of cream)^[1]. A small study (n=2) reported that systemic absorption was < 0.013% after application to the forearm. This equates to approximately 2.6 mcg of miconazole being absorbed per gram of cream. In this study drug absorption was promoted by the use of an occlusive dressing^[2]. Another reference source suggested 0.35% is absorbed following topical application, which is approximately 70 mcg per gram of cream^[3]. Although increased absorption would be expected in the presence of inflamed skin, total systemic exposure will still be extremely low.

Miconazole has been used to treat vulvovaginal candidiasis in pregnant women without evidence of an increase in foetal malformations^[4]. The systemic availability from vaginally administered products is approximately 1-2%^[2,3]. Therefore, women inserting one applicatorful (5g of a 2% cream ie 100mg) vaginally each day may have systemic exposure of approximately 1.4mg miconazole^[2]. Similar results have been found for vaginal use of clotrimazole vaginal cream^[4].

Miconazole and clotrimazole are among the topical agents considered to be 'drugs of choice' when treatment of fungal infections is considered necessary in pregnancy^[5].

Conclusions:

We would not expect any adverse outcomes to be associated with the use of small amounts of miconazole 2% cream for interdigital fungal infections in the latter stages of pregnancy. This is because of low systemic exposure and lack of association with adverse foetal outcomes. The risk will be further minimised by avoiding use in the first trimester of pregnancy. However, there should be risk:benefit assessment prior to using any drug in pregnancy.

References:

1. Parfitt K. Martindale (32nd ed), 1999
2. Drugdex, Micromedex database
2. Dollery C. Therapeutic Drugs, 1999
3. Briggs GG *et al.* Drugs in pregnancy and lactation (5th ed), 1999
4. Speight T, Holford N. Avery's Drug Treatment (4th ed), 1997

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