

Thrush in Pregnancy

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Information in this leaflet is general in nature and should not take the place of advice from your healthcare provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect or developmental problem.

What is a thrush infection?

Thrush (also known as a yeast infection) is a common fungal infection of the vagina caused by excessive growth of a type of *Candida*. *Candida albicans* is the organism in most cases.¹ It is quite normal to have *Candida* living in the gut and vagina, without causing any harm or symptoms. Its overgrowth is prevented by the body's normal, 'good' bacteria. However, *Candida* can multiply under certain conditions, such as pregnancy. Thrush is twice as common in pregnant woman compared to those who are not pregnant due to higher levels of the hormone oestrogen as well as other changes to a pregnant woman's body. *Candida* also may multiply after treatment with antibiotics, or in women with raised blood sugar levels, especially those with diabetes.

Symptoms of vaginal thrush

Many women have *Candida* present in the vagina but are unaware because they have no specific symptoms. When the *Candida* organism multiplies, symptoms may then develop. It is normal for pregnant women to have some vaginal discharge during pregnancy. The typical symptoms of thrush however are itching, stinging and soreness, with redness of the vulva as well as a thick, white, vaginal discharge (that usually does not smell).

Self-diagnosis is not reliable. It is highly recommended to consult a doctor or midwife to confirm diagnosis before starting treatment, as it may be necessary to have a swab taken for testing. This is especially important if symptoms do not improve after treatment or if the infection returns. Other types of *Candida* may be present (or even

another infection altogether), and these may not respond to the commonly used antifungal treatments.²

Issues for pregnancy

Thrush is not harmful to an unborn baby. Women are advised to use effective treatment during pregnancy as the infection is uncomfortable and sometimes painful for them. There is also a risk that the *Candida* organism can be passed to the baby during childbirth. However, if this happens, it is generally harmless and easy to treat.

There is a possible link between the presence of vaginal *Candida* and premature birth.³ Researchers are currently investigating whether treating women with vaginal thrush is effective in reducing preterm birth. Hopefully, these studies will show if treating *Candida* in pregnancy helps to reduce the rate of preterm birth and late miscarriage.

Diet and lifestyle changes

There are many factors that are thought to contribute to a woman developing vaginal thrush, though there is very little research on this topic. Wearing tight pants or synthetic underwear may encourage thrush, so cotton underwear and loose clothing is preferred. It is also recommended that woman avoid vaginal douching and using perfumed or antiseptic products and soaps in the vaginal area. Because yeast grow more in moist conditions, it is recommended to change out of swimming costumes and gym gear as soon as possible.¹

There is limited research to support dietary changes, but oral probiotics and a low sugar diet are often suggested for women who have repeated thrush infections.

Medicines recommended^{1,2,4}

All these medications are available over the counter from a pharmacy.

- Vaginal antifungal preparations** are the treatments of choice in pregnancy because there is reassuring safety information from pregnancy studies. In addition, absorption into the mother's bloodstream is very low so it is unlikely to transfer to the unborn baby. Recommended treatments are:
 - **Clotrimazole** 1% cream – one applicatorful inserted into the vagina at night for 6 days.
 - Clotrimazole 100 mg pessary - one pessary inserted in the vagina at night for 6 days.
 - Nystatin 1000,000 units/dose - 1 applicatorful into the vagina daily at bedtime for 14 days.
 - **Vaginal applicators may be used with care in pregnancy.** Treating the outside area (the vulva) alone will not work.
 - 6-7 days of treatment is more likely to be effective than shorter courses.
 - Vaginal creams and pessaries are most conveniently used at night just before going to bed. Wearing a sanitary pad overnight will soak up any leaking medication.
 - These antifungal products are well tolerated, but very rarely can cause a skin allergy. Nystatin has a very low rate of side effects but may be a less effective treatment.

- Oral Fluconazole** is considered second line treatment in pregnancy (after 1st trimester) and may be required if topical preparations (creams) fail to treat vaginal thrush or a woman does not tolerate topical therapy. Fluconazole has been strongly associated with birth defects at continuous high oral (or intravenous) doses (more than 400mg daily) in the first trimester. However, it is not expected that there is an increased risk of birth defects when fluconazole 150mg has been taken as a single dose.^{1,2,5} There is limited safety data about use of long term daily 150mg treatment and it is therefore not recommended in pregnancy.

Information on whether fluconazole can increase the chance for miscarriage is mixed but recent data has not suggested an increased

risk with fluconazole 150mg taken as a single dose.⁶

We would be reassuring about inadvertent use of a single 150mg dose of fluconazole in early pregnancy but do not consider it a recommended treatment in the first trimester.^{1,5}

- Hydrocortisone (a low strength topical corticosteroid), applied sparingly and short-term to the vulval area helps relieve redness or itch and is considered safe in pregnancy.**^{1,4}

Ask your midwife, doctor or pharmacist for the brand names of these medicines.

It is important to use the recommended dose and see your doctor if symptoms persist.

Partners

It is not considered necessary to treat sexual partners, as thrush is not a sexually transmitted infection. However, if a woman has recurrent thrush infection, it is advisable that her partner is tested and treated if infection is present.

References

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Should you wish to discuss any aspect of this information please send an email to

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