

Gefitinib and methotrexate to resolve tubal ectopic pregnancy: the GEM3 RCT

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Plain language summary

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Plain language summary

What was the question?

A tubal ectopic pregnancy is where a fertilised egg is not growing in the womb. The pregnancy cannot be saved and the woman is at risk of losing her fallopian tube and if this pregnancy is left to grow can even die. Current treatment is with methotrexate or surgery. An operation can happen because either the ectopic pregnancy has ruptured and caused internal bleeding, the medical treatment has not worked and the ectopic pregnancy needs to be removed or the patient can choose to have an operation. However, methotrexate treatment can fail in approximately 30% of women. We carried out research to see if the addition of a new drug (gefitinib, a drug used for lung cancer) to methotrexate could lower the number of women needing an operation to remove their ectopic pregnancy.

What did we do?

We involved 328 women with a stable tubal ectopic pregnancy, who were being treated medically with methotrexate, and randomly assigned them to have methotrexate alone or a combination of methotrexate and gefitinib. The gefitinib was taken in tablet form for 7 days, and the methotrexate was given as an injection. We followed the women up in line with their clinical care until their ectopic pregnancy resolved or they had surgery to remove the ectopic pregnancy.

What did we find?

The addition of gefitinib to methotrexate did not reduce the number of women who required surgery to remove their ectopic pregnancy. More women taking gefitinib experienced side effects, such as a facial rash or diarrhoea.

What does this mean?

Treatment with methotrexate remains the only drug treatment option for ectopic pregnancy. More research is needed.

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