



The University of Edinburgh

News Release

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Lung cancer drug could aid plight of ectopic pregnancy patients

Women with ectopic pregnancies could be spared surgery if they are treated with a lung cancer drug, a study suggests.

Researchers treated ectopic pregnancies – where an embryo implants inside the Fallopian tube – by combining an existing treatment with a lung cancer therapy.

They found that prescribing both drugs together was more effective at helping cure an ectopic pregnancy than the conventional drug alone.

The lung cancer drug – called gefitinib – helps by blocking a protein that is known to encourage cell growth, and which was found to be present in high levels at the site of ectopic pregnancies.

Combining gefitinib with the conventional treatment, which is called methotrexate, could reduce the need to remove the Fallopian tube in a significant number of cases. This would help the patient's level of fertility - say researchers led by Dr Andrew Horne at the University of Edinburgh and Dr Stephen Tong at the University in Melbourne.

Ectopic pregnancy can be treated with drugs in the early stages of development, but surgery is needed when it is more developed.

Researchers also found that the drug combination was able to shorten the time it took to successfully treat ectopic pregnancies in women who did not need surgery.

Around 12,000 women undergo an ectopic pregnancy in the UK each year, and the condition is responsible for up to eight per cent of pregnancy-related deaths.

The study, published in the journal *Obstetrics and Gynaecology*, involved a trial of 12 women with ectopic pregnancies. Researchers now plan to run a larger trial.

Dr Andrew Horne, of the University of Edinburgh's Medical Research Council Centre for Reproductive Health, said: "An ectopic pregnancy can be extremely stressful for the woman involved. If we can reduce the need for surgery, and thereby help fertility levels, then that would be an enormous benefit. Reducing the treatment time for women who do not need surgery would also have a significant impact in reducing the emotional stress of such a diagnosis."

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Dr Stephen Tong is supported by funding from National Health and Medical Research Council of Australia, and Dr Andrew Horne is funded by the UK Medical Research Council.

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