## News Release

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## Smokers more prone to bowel condition relapses, study suggests

Smoking is strongly linked to relapse of a serious bowel condition, research has confirmed.

People with Crohn's disease are more likely to experience a recurrence after surgery if they continue to smoke, the study found.

Doctors recommend people with the condition stop smoking to avoid their illness worsening.

The researchers also assessed whether a drug treatment that is commonly used in treating the disease is effective at preventing it from coming back after surgery.

They found that the therapy had limited beneficial effects for non-smokers in preventing relapse after surgery. It did, however, offer protection for smokers.

The team says people who are unable to quit smoking may be offered the therapy immediately after surgery but the evidence does not justify the use of the drug in non-smokers

Crohn's disease occurs when the immune system attacks the lining of the gut and bowel to cause severe inflammation. It results in abdominal pain, urgent diarrhoea, sickness and profound lethargy.

Patients are initially treated with one of a class of drugs called thiopurines, which dampen the immune system.

More than half of patients require surgery to remove the affected section of their bowel. Surgery is not curative, however, and the condition often relapses.

Thiopurines have often been prescribed to patients after surgery to try to prevent relapse but until now, it was not clear whether the therapy offers any benefit.

Researchers led by the University of Edinburgh conducted a UK-wide trial of the therapy involving 240 people with Crohn's disease.

Patients were monitored for three years after they had undergone surgery. Some 128 patients were treated with a drug from the thiopurine family called mercaptopurine and 122 were given a dummy medicine.

Only three of 29 smokers treated with the therapy experienced a relapse compared with 12 of 26 who received the dummy drug.

The rate of relapse in the non-smoking group was much lower and was unaffected by treatment with the medicine.

Professor Jack Satsangi, of the Gastro-intestinal Unit, Centre of Genomics and Experimental Medicine at the University of Edinburgh, and Consultant Physician at the Western General Hospital said: "There is an unmet need to identify therapies or life-style changes that prevent Crohn's disease recurrence after surgery to avoid patients having to undergo multiple operations.

"Our study confirms that the most important thing somebody with Crohn's disease can do for their health is not to smoke. People who are unable to quit smoking are at high risk of relapse after surgery and may begin treatment with thiopurines immediately after their operation.

"For non-smokers, however, we found that thiopurines offer little benefit at preventing relapse after surgery. For these patients, close monitoring in the first year is the best course of action, rather than immediate drug therapy."

Crohn's disease is highly prevalent in Scotland, and the incidence in children has risen dramatically in recent years.

The study, published in *The Lancet Gastroenterology and Hepatology*, was funded by the Medical Research Council.

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