No increase in colorectal cancer after obesity surgery

26 March 2021

Colorectal cancer risk does not rise after bariatric surgery, a study from the University of Gothenburg shows. This finding is important for patients with obesity, and their healthcare professionals, when deciding upon such an operation.

Obesity is a known risk factor for several types of cancer, including colorectal cancer (affecting the colon or rectum). It is already established that bariatric surgery leads to a decrease in overall cancer risk in patients with obesity.

However, some studies on colorectal cancer have shown an elevated cancer risk after bariatric surgery, while others have reported a risk reduction. These conflicting results have raised concerns about this surgery and highlighted the need for more long-term studies analyzing the effect of bariatric surgery on colorectal cancer risk.

The current study, published in PLOS ONE, is based on data from the SOS (Swedish Obese Subjects) study, which began in 1987 and is led and coordinated from the Sahlgrenska Academy, University of Gothenburg, as well as data from the Swedish Cancer Register, kept by the National Board of Health and Welfare.

The scientists studied a group of 4047 individuals with obesity; 2,007 underwent bariatric surgery (surgery group) and 2,040 individuals received non-surgical obesity treatment (control group). The groups were comparable in terms of sex, age, body composition, risk factors for cardiovascular disease, psychosocial variables, and personality traits.

The median follow-up period of the study exceeded 22 years. Over this time, the surgery group underwent a significant weight loss, while the controls broadly retained their original weight. During the follow-up period, there were 57 cases of colorectal cancer in the surgery group and 67 in the control group.

"In this very long-term study, we could not verify that bariatric surgery is associated with changes in colorectal cancer risk in patients with obesity. This result is of high clinical relevance", states Magdalena Taube, associate professor at the department of Molecular and Clinical Medicine at Sahlgrenska Academy and the lead author of the study.

The SOS study is the only prospective, controlled study in the world that examines the very long-term effects of obesity surgery compared with conventional obesity treatment. This very long-term follow-up has been crucial for the conclusion of this study: the risk of colorectal cancer does not increase after bariatric surgery.

"Bariatric surgery leads to a substantial weight loss and better health in most patients, but it's still important to keep up healthy living habits and go for regular check-ups after the operation too," Taube concludes.


Provided by University of Gothenburg


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.