

# Synthetic mesh can improve outcome of prolapse surgery

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(Medical Xpress) -- A Nordic multicentre study, headed by researchers from Karolinska Institutet, shows that pelvic organ prolapse surgery using synthetic mesh can be more effective than traditional surgery. The advantages indicated by the study mainly concern restored genital anatomy and more efficient symptom relief, although there is an associated greater risk of complications. The study is published in the renowned scientific periodical *The New England Journal of Medicine*.

Prolapse is a common post-childbirth condition and involves the loss of support for the vagina and pelvic organs, which descend and in some cases protrude through the vaginal opening. In recent years it has been observed that traditional prolapse surgery often fails to produce the desired results. In Sweden an estimated 7-8,000 prolapse operations are performed annually, and in the US approximately 300,000 procedures are performed each year.

The present study compared traditional prolapse surgery with a new method based on the [surgical implantation](#) of a polypropylene mesh to provide permanent support for the weakened [pelvic floor](#). The same type of mesh is used routinely for other [surgical interventions](#), such as [hernias](#) and incontinence. The study included 389 women with pelvic organ prolapse; of these, 200 were randomly selected for mesh surgery while the others were operated on in the conventional manner.

The results of the study showed that mesh surgery reduced the risk of relapse, and the patients experienced a significantly better outcome with

respect to prolapse symptoms. However, it was also observed that the [mesh](#) implant caused additional complications during surgery as well as several cases of mesh-related problems up to a year afterwards

"The new surgical method has distinct advantages over [traditional surgery](#)," says Christian Falconer, Associate Professor at Karolinska Institutet and Senior Consultant at Danderyd Hospital. "But the fact that the risk of complications increases means that we must be careful to inform the patient and weigh up the pros and cons of the two methods in every individual case."

Dr Falconer also notes that the study is important as it confirms a new treatment principle and establishes the use of a permanent vaginal support as an alternative method of prolapse surgery. However, work still needs to be done on material and method development in order to reduce the risk of complications and to identify patients for whom the method can bring particular benefits.

The article in *The [New England Journal of Medicine](#)* is the result of a Nordic collaboration involving 53 clinics in Sweden, Norway, Finland and Denmark. Associate professor and senior consultant Daniel Altman and Dr Falconer, both from Karolinska Institutets department at Danderyd Hospital (KI DS) headed the study. The study was supported by grants from the Swedish Society of Medicine, the Karolinska Institutet research foundations, the Stockholm County Council, and the medical technology company Ethicon.

**More information:** Anterior Colporrhaphy versus Transvaginal Mesh for Pelvic Organ Prolapse, *The New England Journal of Medicine*, online 11 May 2011 [www.nejm.org/](http://www.nejm.org/)

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