Stress urinary incontinence: Minimally invasive operations as effective as open surgery
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New, less invasive surgical treatments for stress urinary incontinence in women are just as effective as traditional open surgical approaches, according to Cochrane Researchers. The researchers carried out a systematic review of trials comparing different surgical approaches to treating the condition.

A third of women suffer from stress urinary incontinence. As well as the social distress involved, the condition places a significant financial burden on health systems and individuals. Surgery is considered a last resort when other treatments, such as pelvic floor muscle training and drug therapies, fail. In sling operations, strips of material are positioned under the urethra and traditionally are anchored to muscles and ligaments to form a sling. When the woman strains the sling tightens and supports the bladder. In newer minimally invasive sling operations a synthetic material is inserted underneath the urethra without fixing to muscles or ligaments. The procedure can be performed "blind" by inserting the synthetic sling material with a needle in what is called a minimally invasive suburethral sling operation, which can be carried out under local anaesthetic.

The purpose of the current review was to determine whether less invasive versions of the procedure are as effective as traditional open surgery and other surgical approaches.

The authors collected data from 62 trials involving 7,101 women. Minimally invasive synthetic suburethral sling operations were found to be just as effective as traditional sling operations, with short term cure rates of 80%. They also had shorter operating times than conventional methods. Minimally invasive sling operations were also more effective than a second type of open surgery, in which the vagina is lifted using stitches to help support the bladder and urethra. However, when this second type of surgery was carried out using keyhole cuts there was less evidence that minimally invasive sling operations worked better.

Different ways of inserting the tape in sling operations were also compared and those in which the tape was passed behind the pubic bone appeared to be most effective, although this approach was more likely to cause bladder injury. One particular type of material, called type I mesh, was more effective and appeared to result in fewer complications.

"These were only small trials and they varied greatly in quality, but we were able to make comparisons between different types of surgery and we found that minimally invasive sling operations for stress incontinence in women are very effective for this condition," says lead researcher, Joseph Ogah, who is based at the Leeds University Teaching Hospital in Leeds, in the UK.

"However, few of the trials we looked at reported outcomes after one year and therefore the long term efficacy of these procedures requires further investigation. It is also of utmost importance to assess how these procedures impact on women's quality of life, so this needs to be addressed in further studies," says Ogah.

Source: Wiley (news : web)