

MRI versus laparoscopy to diagnose the main causes of chronic pelvic pain in women: a test-accuracy study and economic evaluation

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Plain English summary

MRI vs. laparoscopy for CPP diagnosis

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Plain English summary

Chronic pelvic pain (CPP) is pain in the pelvic and lower abdominal region that lasts for 6 months or longer. It can be caused by a gynaecological condition, such as endometriosis, or by bladder or bowel conditions. Most women will be offered laparoscopy, a keyhole surgery procedure to examine the inside of the abdomen, for treatment. Some other conditions can also be treated at the same time. In about half of all women, no obvious cause can be found for their pain.

Magnetic resonance imaging (MRI) scans can identify painful conditions, but we do not know whether or not they are better than laparoscopy. We performed a complex study in which nearly 300 women had a pelvic examination, an ultrasound scan, a MRI scan and then laparoscopy, and also completed symptom questionnaires. Gynaecologists considered all of this information and gave an opinion on the cause of pain for each woman. The study concluded that MRI scans could only correctly rule out a gynaecological condition in half of women judged to have no obvious cause, and missed half of the women who did have a gynaecological condition. Furthermore, MRI did not help to identify those women who could be treated during the laparoscopy; for every group of 1000 women with CPP having MRI scans, 369 women would then have an unnecessary laparoscopy because the MRI scans mistakenly showed a treatable cause, and 136 women would be incorrectly denied a laparoscopy, when actually there was a treatable cause that was not seen on the MRI scan. We do not think that all women should have a MRI scan using the currently available technologies.

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