1. [Surgical interventions for the management of chronic pelvic pain in women.](https://pubmed.ncbi.nlm.nih.gov/34923620/)

Leonardi M, Armour M, Gibbons T, Cave A, As-Sanie S, Condous G, Cheong YC.Cochrane Database Syst Rev. 2021 Dec 20;12:CD008212. doi: 10.1002/14651858.CD008212.pub2.PMID: 34923620 Review.

## Abstract

**Background:**Chronic pelvic pain (CPP) is a common gynaecological condition accounting for 20% of all gynaecological referrals. There are wide ranges of causes with overlapping symptomatology, therefore the management of the condition is a formidable challenge for clinicians. The aetiology of CPP is heterogeneous and in many cases, no clear diagnosis can be reached. It is in this scenario that the label of chronic pelvic pain syndrome (CPPS) can be applied. We defined women with CPPS as having a minimum duration of pain of at least 6 months, including with a diagnosis of pelvic congestion syndrome, but excluding pain caused by a condition such as endometriosis. Many surgical interventions have been tried in isolation or in conjunction with non-surgical interventions in the management with variable results. Surgical interventions are invasive and carry operative risks. Surgical interventions must be evaluated for their effectiveness prior to their prevalent use in the management of women with CPPS.

**Objectives:**To review the effectiveness and safety of surgical interventions in the management of women with CPPS.

**Search methods:**We searched the Cochrane Gynaecology and Fertility Group (CGF) Specialised Register of Controlled Trials, CENTRAL, MEDLINE, Embase and PsycINFO, on 23 April 2021 for any randomised controlled trials (RCT) for surgical interventions in women with CPPS. We also searched the citation lists of relevant publications, two trial registries, relevant journals, abstracts, conference proceedings and several key grey literature sources.

**Selection criteria:**RCTs with women who had CPPS. The review authors were prepared to consider studies of any surgical intervention used for the management of CPPS. Outcome measures were pain rating scales, adverse events, psychological outcomes, quality of life (QoL) measures and requirement for analgesia.

**Data collection and analysis:**Two review authors independently evaluated studies for inclusion and extracted data using the forms designed according to Cochrane guidelines. For each included trial, we collected information regarding the method of randomisation, allocation concealment, blinding, data reporting and analyses. We reported pooled results as mean difference (MDs) or odds ratios (OR) and 95% confidence interval (CI) by the Mantel-Haenszel method. If similar outcomes were reported on different scales, we calculated the standardised mean difference (SMD). We applied GRADE criteria to judge the overall certainty of the evidence.

**Main results:**Four studies met our inclusion criteria involving 216 women with CPP and no identifiable cause. Adhesiolysis compared to no surgery or diagnostic laparoscopy We are uncertain of the effect of adhesiolysis on pelvic pain scores postoperatively at three months (MD -7.3, 95% CI -29.9 to 15.3; 1 study, 43 participants; low-certainty evidence), six months (MD -14.3, 95% CI -35.9 to 7.3; 1 study, 43 participants; low-certainty evidence) and 12 months postsurgery (MD 0.00, 95% CI -4.60; 1 study, 43 participants; very low-certainty evidence). Adhesiolysis may improve both the emotional wellbeing (MD 24.90, 95% CI 7.92 to 41.88; 1 study, 43 participants; low-certainty evidence) and social support (MD 23.90, 95% CI -1.77 to 49.57; 1 study, 43 participants; low-certainty evidence) components of the Endometriosis Health Profile-30, and both the emotional component (MD 32.30, 95% CI 13.16 to 51.44; 1 study, 43 participants; low-certainty evidence) and the physical component of the 12-item Short Form (MD 22.90, 95% CI 10.97 to 34.83; 1 study, 43 participants; low-certainty evidence) when compared to diagnostic laparoscopy. We are uncertain of the safety of adhesiolysis compared to comparator groups due to low-certainty evidence and lack of structured adverse event reporting. No studies reported on psychological outcomes or requirements for analgesia. Laparoscopic uterosacral ligament ablation or resection compared to diagnostic laparoscopy/other treatment We are uncertain of the effect of laparoscopic uterosacral ligament/nerve ablation (LUNA) or resection compared to other treatments postoperatively at three months (OR 1.26, 95% CI 0.40 to 3.93; 1 study, 51 participants; low-certainty evidence) and six months (MD -2.10, 95% CI -4.38 to 0.18; 1 study, 74 participants; very low-certainty evidence). At 12 months post-surgery, we are uncertain of the effect of LUNA on the rate of successful treatment compared to diagnostic laparoscopy. One study of 56 participants found no difference in the effect of LUNA on non-cyclical pain (P = 0.854) or dyspareunia (P = 0.41); however, there was a difference favouring LUNA on dysmenorrhea (P = 0.045) and dyschezia (P = 0.05). We are also uncertain of the effect of LUNA compared to vaginal uterosacral ligament resection on pelvic pain at 12 months (MD 2.00, 95% CI 0.47 to 3.53; 1 study, 74 participants; very low-certainty evidence). We are uncertain of the safety of LUNA or resection compared to comparator groups due to the lack of structured adverse event reporting. Women undergoing LUNA may require more analgesia postoperatively than those undergoing other treatments (P < 0.001; 1 study, 74 participants). No studies reported psychological outcomes or QoL.

**Authors' conclusions:**We are uncertain about the benefit of adhesiolysis or LUNA in management of pain in women with CPPS based on the current literature. There may be a QoL benefit to adhesiolysis in improving both emotional wellbeing and social support, as measured by the validated QoL tools. It was not possible to synthesis evidence on adverse events as these were only reported narratively in some studies, in which none were observed. With the inadequate objective assessment of adverse events, especially long-term adverse events, associated with adhesiolysis or LUNA for CPPS, there is currently little to support these interventions for CPPS.