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Surgical Treatment for Chronic Pelvic Pain

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Abstract:

The source of chronic pelvic pain may be reproductive organ, urological, musculoskeletal - neurological, gastrointestinal, or myofascial. A psychological component almost always is a factor, whether as an antecedent event or presenting as depression as result of the pain.

Surgical interventions for chronic pelvic pain include: 1) resection or vaporization of vulvar/vestibular tissue for human papillion virus (HPV) induced or chronic vulvodynia/vestibulitis; 2) cervical dilation for cervix stenosis; 3) hysteroscopic resection for intracavitary or submucous myomas or intracavitary polyps; 4) myomectomy or myolysis for symptomatic intramural, subserosal or pedunculated myomas; 5) adhesiolysis for peritubular and periovarian adhesions, and enterolysis for bowel adhesions, adhesiolysis for all thick adhesions in areas of pain as well as thin ahesions affecting critical structures such as ovaries and tubes; 6) salpingectomy or neosalpingostomy for symptomatic hydrosalpinx; 7) ovarian treatment for symptomatic ovarian pain; 8) uterosacral nerve vaporization for dysmenorrhea; 9) presacral neurectomy for disabling central pain primarily of uterine but also of bladder origin; 10) resection of endometriosis from all surfaces including removal from bladder and bowel as well as from the rectovaginal septal space. Complete resection of all disease in a debulking operation is essential.

Keywords:

INTRODUCTION

The source of chronic pelvic pain may be reproductive organ, urological, musculoskeletal - neurological, gastrointestinal, or myofascial.

In a review of 500 patients treated between 2010 and 2022, who presented with chronic pelvic pain, 70% were found to have reproductive organ disease, 8% musculoskeletal - neurological, 7% myofascial, 5% urologic, and 10% gastrointestinal.

Only with an accurate diagnosis can surgical therapy be appropriately planned. Therefore, a complete history and physical spans all of the systems which are sources of chronic pelvic pain and involves diagnostic skills from the specialties which deal with these individual disorders.

SURGICAL INTERVENTION

If the clinician is unable to arrive at a proper diagnosis, patient assisted or conscious laparoscopy is of great benefit. With the patient conscious and interactive with the surgeon,

laparoscopy can be performed and physical examination repeated with a clear view of the inner and outer surfaces, muscles and organs and the source of pain delineated by stimulus - response techniques.

Effectiveness of Surgical Interventions:

1. Partial vulvectomy and vestibulectomy for chronic vulvodynia and vestibulitis

Treatment of the vulva and vestibule by laser vaporization or resection is a last resort after all attempts at medical therapy have failed to resolve chronic pain in this area. The technique involves excision of all clinically involved tissues as identified by pain mapping followed by reconstruction of the excised area. If laser is used it is frequently possible to vaporize affected superficial layers, thereby avoiding disfigurement. Successful outcomes by surgical therapy for vulvodynia/vestibulitis ranges from 50-80%.

2. Trigger point injection and physical therapy

Trigger point injections are appropriate for myofascial pain with presence of a tender point, muscle twitch reaction with palpation of the trigger point, and presence of a thickened band-like structure in the muscle tissue.[6] Injection of the trigger point with a dry needle or 1-10 ml of 1% lidocaine brings immediate relief. Repeat treatments may be necessary. Physical therapy techniques of soft tissue mobilization, spray and stretch, contraction/relaxation, reciprocal inhibition, and post-isometric relaxation are also helpful. Physical therapy treatment for myofascial pain will resolve 20-30% of cases without any other intervention.

3. Hernia Repair

Patients with pelvic pain may have a hernia. To diagnose a hernia, the patient must be examined in a standing position after she has been on her feet for a prolonged period of time. Hernia repair may be performed laparoscopically or by open procedures. Inguinal, sciatic, incisional and ventral hernia repairs may require the placement of mesh either laparoscopically or by open technique. Femoral hernias may require open technique. Hernias are repaired by reduction and excision of the herniated peritoneal sac and closure of the fascial defect by suture or mesh technique. It is also acceptable for certain hernias to leave the peritoneal sac and obstruct the hernia with a plug of mesh. The objective of proper hernia repair is to re-establish proper anatomical relationships and strengthen the fascial covering. To be repaired, hernias must be anticipated and recognized and proper techniques for their repair learned.

Sciatic hernia was found in 1.8% of 1100 patients who required laparoscopic surgery for chronic pelvic pain in one series.

4. Vaginal Vault Hernias

Hernias that occur due to breaks in the vaginal fascia result in cystoceles, enteroceles and rectoceles. Cystocele, rectocele and enterocele can cause lower abdominal or perineal pain in women. This pain is usually not severe and will usually respond to surgery. Cystocele can be repaired by the technique of paravaginal repair as performed laparoscopically by

Liu. Vaginal vault prolapse can be corrected laparoscopically by high McColl procedure or by the Richardson/Saye procedure.

5. Uterine stabilization, repositioning and suspension procedures and cervical dilation for cervical stenosis

Uterine suspension is used for pelvic congestion syndrome, collision dyspareunia, severe disabling dysmenorrhea, and after extensive surgery in the cul-desac resulting in raw surfaces.[21] The objective of the uterine suspension is to position and stabilize the uterus in a neutral position correcting the retroversion. The uterus is then in a position to more easily discharge its contents at menses. Venous drainage is promoted and congestion does not occur, and the cervix is no longer rotated about the uterosacral ligaments when struck during intercourse, instead the cervix and uterus move as a unit along a normal physiologic arc.

6. Resection of intracavitary and submucous myomas and intracavitary polyps.

Intrauterine structures such as intracavitary and submucous myomas and intracavitary polyps are a source of significant pain of a cramping nature throughout the cycle. Hysteroscopic resection of polyps can be performed by resectoscope or simple mechanical retrieval with polyp or ring forceps. Intracavitary myomas can be removed by resectoscopic or mechanical means by use of ring forceps.

7. Laparoscopic uterosacral nerve ablation (LUNA)

The uterosacral ligaments carry many of the afferent sensory nerve fibers to the lower parts of the uterus by way of the Lee-Frankenhauer plexus, which lies in and around the uterosacral ligaments as they insert into the posterior aspect of the cervix. The destruction of these sensory nerve fibers provides pain relief for a period of three months for 80% of patients, and 12 months for 50%. The division of these ligaments relieved pain in several studies. LUNA is an appropriate procedure for dysmenorrhea and central uterine pain. Central pain which is also associated with nodularity and tenderness of the uterosacral ligaments requires resection of the uterosacral nerves because of the frequent finding of endometriosis impregnating the uterosacral ligament.

8. Presacral Neurectomy

For patients with severe disabling central dysmenorrhea and central pain, presacral neurectomy is an effective procedure.[33] Significant constipation and urinary retention can occur following presacral neurectomy. The presacral neurectomy is performed by elevating and incising the peritoneum overlying the sacral promontory one centimeter caudad to the aortic bifurcation. The underlying adipose tissues are bluntly dissected, cauterized and cut and the nerve plexus is identified and freed from the underlying tissue and elevated, clipped or cauterized, and resected for histological evaluation.[32] In the region near the aortic bifurcation, two or three large contiguous nerve bundles will constitute the superior hypogastric plexus.[32] If the dissection is carried out caudad along the sacral promontory,

the nerve fibers are less distinct and 12-15 individual fibers will be present, requiring complete resection of the underlying tissue with the nerve fibers to accomplish the transection of the superior hypogastric plexus.

9. Adhesiolysis.

The goal of pelvic pain surgical intervention is 1) restoration of normal anatomy, 2) resection of abnormal tissue, and 3) prevention of recurrence of the conditions that resulted in the pain. The effect of adhesions on pain is controversial and will likely be resolved with laparoscopic pain mapping performed under local anesthesia.[6] From early experience with the technique of Patient Assisted Laparoscopy under local anesthesia, it appears that traction even on filmy adhesions creates a sensation of significant pain and that thickened, more mature adhesions which do not cause twisting or entrapment of intra-abdominal structures such as bowel, frequently are not precursors of pain. Treatment of pelvic adhesions by laparoscopy was effective in relieving symptoms in patients with chronic pelvic pain.

10. Laparoscopic Appendectomy

Appendicopathy does exist and can be the cause of chronic right lower quadrant pain. In 55 laparoscopic appendectomies performed for chronic right lower quadrant abdominal and pelvic pain, the pathologic conditions included entrapping adhesions in 38, chronic appendicitis in 12, and endometriosis in 5. Forty-four of these patients had complete relief, nine satisfactory improvement, and two no relief.[53] Sixty-three patients had appendectomy for chronic lower abdominal pain, 79% of whom had pain localized to the right lower quadrant. All of these women had had previous surgery for pain without relief, and 54% had sought psychologic intervention or pain clinic treatment to no avail. Histologically, 92% of the removed appendixes revealed abnormality, and 95% of these patients were completely cured.In these five recent reports, appendectomy resulted in relief of symptoms of right lower quadrant pain. In addition, there does not appear to be a correlation between visible pathology, histopathology, and complaints of pain relieved by appendectomy. Appendectomy should be performed if right lower quadrant pain is a significant part of the patient's pain profile or if the appendix appears abnormal, that is involved in adhesions, thickened or discolored, or stiff when grasped. Appendectomy can be easily performed according to the technique first described by Semm.

CONCLUSION

With application of all currently available laparoscopic modalities, 80% of women with chronic pelvic pain will report a significant reduction in pain which is maintained for up to three years. Individual factors contributing to pain cannot be determined, although the frequency of endometriosis dictates that its complete treatment be attempted. The beneficial effect of uterosacral nerve ablation may be as much due to treatment of occult endometriosis in the uterosacral ligaments as to transection of the nerve fibers themselves. The benefit of the presacral neurectomy appears to be definite but strictly limited to midline

pain. Appendectomy, herniorraphy, and even hysterectomy are all appropriate therapies for patients with chronic pelvic pain.

Even with all laparoscopic procedures employed, fully 20% of patients experience unsatisfactory results.[2] In addition, these patients are often depressed.[77] Whether the pain contributes to the depression or the depression to the pain is irrelevant to them. Selected referrals to an integrated pain center with psychologic assistance together with judicious prescription of antidepressant drugs will likely benefit both women who respond to surgical intervention and those who do not.

RECOMMENDATION

A maximum surgical effort must be expended to resect all endometriosis, restore normal pelvic anatomy, resect nerve fibers, and treat surgically accessible disease. In addition, it is important to provide patients with chronic pelvic pain sufficient psychologic support to overcome the effects of the condition, and to assist them with under-lying psychologic disorders.

References

1. Carter JE.Chronic pelvic pain in women. Presented at Endometriosis Symposium, ISGE Annual Meeting - April, 16, 1996, Chicago, IL
2. Carter JE. Laparoscopic treatment of chronic pelvic pain in 100 adult women. J Amer Assoc Gynecol Laparosc. 1995;2(3):255–262
3. Demco L.Patient assisted laparoscopy. Presented at ISGE Annual Meeting, April 16, 1996, Chicago, IL
4. Bornstein J, Zarfati D, Abramovici H. Perineoplasty compared with vistibuloplasty for severe vulvar vestibulitis. Br J Obstet Gynaecol. 1995;102:652–655
5. Reid R, Precop SL, Berman NR. Laser therapy for idiopathic vulvodynia. Content OB/GYN. 1995;40:78–90
6. Simons DG. Clinical and etiological update of myofascial pain from trigger points. J Musculoskeletal Pain. 1996;93–121
7. Simons DG, Travell JG. Pelvic floor muscle. Myofascial Pain and Dysfunction - The Trigger Point Manual Williams & Wilkins: Baltimore, MD; 1992;N Vol. 2:110–131
8. Slocumb JC. Chronic somatic, myofascial, and neurogenic abdominal pelvic pain. Clin Obstet Gynecol. 1990;33:145–153
9. Glazer HI, Rodke G, Swencionis C, Hertz R, Young AW. Treatment of vulvar vestibulitis syndrome with electromyographic biofeedback of pelvic floor musculature. J Reprod Med. 1995;40:283–290
10. Kotarinos R, Carter JE.Physical Therapy for Dyspareunia and Chronic Pelvic Pain. Upland, California, October 26-27, 1996
11. Carter JE, Mizes C. Laparoscopic diagnosis and repair of Spigelian hernia: report of technique. Am J Obstet Gynecol. 1992;166:77–78
12. Schultz L, Graber J, Pietrafitta J, et al. Laser laparoscopic herniorrhaphy: a clinical trial preliminary results. J Laparoendosc Surg. 1990;1:41–46

13. Miklos JR, O'Reilly MJ, Saye WB. Sciatic hernia as a cause of chronic pelvic pain in women. Obstet Gynecol. 1998;91:998–1001
14. Rapkin AJ, Mayer EA. Gastroenterologic causes of chronic pelvic pain. In Contemporary Management Of Chronic Pelvic Pain. Ling FW. ed. Obstetrics and Gynecology Clinics of North America; 1994;20(4):663–684
15. Carter JE. A new technique of fascial closure for laparoscopic incisions. J Laparoendosc Surg. 1994;4(2):143–147