OUTCOME OF LAPAROSCOPY IN CHRONIC PELVIC PAIN

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ABSTRACT

Objective *To find out efficacy of laparoscopy in evaluation and treatment of chronic pelvic pain (CPP) in gynecologic patients in terms of arriving at diagnosis.*

Study design *Observational study.*

Place & Duration of study *Department of Obstetrics and Gynaecology Baqai Medical University Karachi, from July 2006 to July 2008.*

Patients and Methods *A total of 30 patients were selected for laparoscopy. Women aged between 20-48 years were included in the study. Pain level was assessed by interviewing patients. Pain level was rated at a scale of 1 to 10 (1=no pain, 10=severe pain). Activity level was also assessed in a similar manner. Laparoscopic surgery was designed to restore normal pelvic anatomy. Patients were completely evaluated for other causes of pain i.e. gastrointestinal, urological, myofacial and musculoskeletal causes. Patients suitable for medical treatment were put on hormones before and after surgery and results observed after 1, 3 and 6 months.*

Results *Endometriosis was found in 17 (56.6%) cases. Deep endometriotic lesions were treated by electrosurgical excision. Lesions on bowel were resected in collaboration with general surgical colleagues. Patients who had extensive endometriosis were selected for medical therapy with gonadotropic releasing hormones for 3 months after laparoscopy. Pelvic adhesions distorting the tubes were found in 5 (16.6%) cases. These were treated by sharp dissection. Bowel adhesion and adhesions between appendix and uterus were found in 1 (3%) case. In this case adhesiolysis was done and appendix was also removed. Two (6.6%) cases had benign ovarian cyst and were removed. Two (6.6%) cases had polycystic ovarian disease and drilling was performed. Three (4%) patients had negative laparoscopy and were reevaluated for other causes of CPP. Five (16.6%) cases underwent hysterectomy for persistent pelvic pain 6 months after laparoscopy.*

Conclusions *Laparoscopy is a useful procedure both in evaluation and treatment of chronic pelvic pain.*

Key words *Chronic pelvic pain, Laparoscopy, Adhesions, Endometriosis.*

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INTRODUCTION:

Chronic pelvic pain can be defined as the pain that is non menstrual for more than 3 months duration, localizes to the anatomic pelvis and leads to significant distress and functional disability.[1] It is estimated that about 20% of the visits to gynaecologist are for pelvic pain, and one

out of every seven hysterectomies are performed for this reason.[2] The bladder, the intestine and the pelvic organs share similar nerves and our brain may not be able to differentiate pain from one area to another. Because of close proximity, exact location of pain is difficult to assess, therefore problem anywhere within these organs felt as 'pelvic pain.[3,4]

Laparoscopic treatment helps in relieving chronic pelvic pain. Among the gynaecological causes endometriosis is the most common cause,[5] followed by adhesions due to previous surgeries, leiomyomas, bowel adhesions, ovarian cyst and appendiceal abnormalities,[6] This study was performed to determine the effectiveness of laparoscopic surgical therapy for abnormal pelvic finding in women with chronic pelvic pain.

PATIENTS AND METHODS:

This study was conducted between July 2006 to July 2008 at Baqai Medical University Karachi. Diagnostic and therapeutic laparoscopy was performed on 30 women. Inclusion criteria were non menstrual pain of 3 months or more causing functional disability, history of previous surgery either obstetrical or gynaecological and pain related to intercourse (dyspareunia). Exclusion criteria was obvious pelvic pathology like malignancy, orthopedic injury, musculoskeletal and psychological causes.

Detailed history and physical examination were performed. Location and character of pain, radiation of pain, factors aggravating and relieving pain, association of the pain with posture, relation with menstrual periods and sexual intercourse etc were inquired. Associated symptoms like nausea, vomiting, constipation, decreased appetite, fatigue and fever were noted. History of previous surgery, infections, obstetrical deliveries, orthopedic injuries and surgery was asked.

Physical examination was done to find out scar of previous surgery, any tenderness into this or other areas including abdomen, pelvis and spine and their characteristics were assessed. Pelvic and rectal examination were carried out to for any tenderness, growth like fibroid, tubo-ovarian mass etc. Laboratory investigations including blood CP, ESR, urine DR, x-ray, ultrasound were carried out. A ten days course of vibramycin and/or metronidazole was given to rule out any chronic pelvic inflammation or urinary infection. Pain level rated on a scale of 1 to 10 (1=no pain and 10=severe pain). Patients recorded their pain level before and 1 month, 3 months and 6 months after surgery.

RESULTS:

Laparoscopic evaluation of 30 patients with chronic pelvic pain revealed endometriosis in 17 (56.6%) cases. Deep endometriosis lesions were treated by electrosurgical excision. Lesions on bowel were resected. Patient with extensive endometriosis were put on gonadotrophic releasing hormones for 3 months following laparoscopy and about 75% of cases were almost completely free of pain. Pelvic adhesions distorting the tubes were found in 5 (16.6%) cases. They present with infertility and dyspareunia. They were treated by sharp dissection.

Bowel adhesions and adhesions between appendix and uterus caused severe lower abdominal pain localized to right lower quadrant of abdomen in 1 (3%) case and treated by sharp dissection and appendix was also removed. Two (6.6%) cases had benign ovarian cyst removed successfully by stripping technique. Two (6.6%) cases had polycystic ovarian syndrome and drilling was performed. Three (10%) cases had negative laparoscopy. These patients were reassured and put on OCPS for 3-6 months in order to exclude deep endometriotic lesion missed during laparoscopy. Five cases underwent hysterectomy after 6 months of laparoscopy.

The pain level preoperatively reported by the patients was 9, At one month following surgery it dropped down to 6, at 3 months it dropped to 3 and at 6 months to 1.5. There were 5 patients who had persistent pain 6 months after laparoscopy and they underwent hysterectomy. Activity level was 3 preoperatively, 5 at one month , 7.5 after 3 months of surgery and 9 after 6 months of surgery.

DISCUSSION:

Pelvic pain sometimes can be thought of as a puzzle that requires careful examination.[7] There are many different causes of pelvic pain and some are non-gynaecologic. Laparoscopy often helps us to establish the cause of pelvic pain and in many cases can be used to treat the cause of the pain as well.[8] With careful inspection gynaecological problems such as endometriosis, pelvic infection, adhesions, ovarian cysts, inflammation or infection of the appendix, intestine or gallbladder may be detected.[9]

The common presentation of chronic pelvic pain is acyclic lower abdominal pain in about 80% of patients, congestive dysmenorrhoea in 26% approximately, pelvic tenderness in 20% of cases while there is a large percentage of patient with no sign on pelvic examination but positive laparoscopic findings in 61%.[10] Studies have shown that 40% of laparoscopies and 10-12% of all hysterectomies are done due to chronic pelvic pain which is close to our figures of hysterectomy. [11]

Endometriosis is one of the most prevalent gynaecologic diagnosis among women with recurrent and progressive chronic pelvic pain (CPP).[12] Patients who underwent laparoscopy for chronic pelvic pain had biopsy confirmed endometriosis as in our study.[13] In few patients presenting to gynaecology clinic with history of urinary urgency, frequency and/or pelvic pain in the absence of UTI are

diagnosed as cases of interstitial cystitis.[14] Chronic pelvic pain without organic pathology e.g adhesions is found in about 25% of cases.[15] We found adhesions distorting tubes in 16.6% cases which is close to the figure by Hebbar of 20.9%.[16]

Patient presenting with chronic pelvic pain and negative laparoscopy were provided an opportunity for treatment with GnRH agonist in our study and endometriosis was found to be the most likely diagnosis missed in such patients.[17] Ideally all the patients should be completely evaluated by psychological, gastrointestinal, urological, gynaecological, myofascial and musculoskeletal examination to avoid the risk that they may undergo during unnecessary procedure.[18]

Laparoscopic surgical therapy for various causes of chronic pain resulted in improvement in almost 75% of cases in our study. A review of 11 published studies on laparoscopy and chronic pelvic pain showed that less than 50% of women were helped by diagnostic and operative laparoscopy. This rate of relief is comparable to that achieved with ovarian suppression therapy when clinical suspicion is very high, that endometriosis is related to chronic pelvic pain. A diagnostic therapeutic trial of GnRH may be considered and in fact may be as effective as laparoscopic therapy.[19]

We performed hysterectomy in 5 (16.6%) cases who failed to obtained long term relief of pain with medical therapy. These women were actually diagnosed with pelvic congestion syndrome, although almost 25% of cases revealed adenomyosis which is almost similar to other study.[20]

CONCLUSIONS:

Laparoscopy continues to be a useful tool in the workup and treatment of patients with CPP. Pain and dyspareunia showed significant improvement after lysis of adhesions. In properly selected cases it resulted in significant symptomatic improvement.

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