Laparoscopic findings in chronic pelvic pain

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Abstract

Background: Chronic pelvic pain is a common problem in reproductive age group women. Diagnosis of chronic pelvic pain needs multidisciplinary approach. Diagnostic laparoscopy is one of the investigations which can help in reaching the diagnosis.

Objective: To know the etiology in chronic pelvic pain.

Methods: This was a descriptive study done in the Department of Obstetrics and Gynaecology of Kathmandu medical college teaching hospital from January 2010 to June 2012 (30 months). All the cases of laparoscopic surgery done for chronic pelvic pain were noted and details of these cases were analyzed regarding age, parity and laparoscopic findings. **Results:** Total 48 cases of Chronic Pelvic Pain underwent diagnostic laparoscopy during the study period. Mean age of cases were 33 years, ranging from 20-46yrs. Almost half of the cases 43.75% were of parity two. Laparoscopic finding was negative in 29.17% and pelvic pathology was present in 70.83% of the cases. Out of the pelvic pathology endometriosis was present in 55.88% followed by pelvic adhesions, pelvic congestion and pelvic inflammatory disease, chronic ectopic in 20.58%, 14.70%, 5.88%, 2.94% respectively.

Conclusion: Diagnostic laparoscopy is a useful modality in the diagnosis of etiology and management of Chronic pelvic pain. In our study, Pelvic endometriosis was the most common pelvic pathology in cases of Chronic pelvic pain.

Key words: Chronic pelvic pain, Diagnostic laparoscopy, Endometriosis

INTRODUCTION

Pain is an unpleasant sensory or emotional experience associated with actual or potential damage¹ whereas Chronic pelvic pain (CPP) is an intermittent or constant pain in the lower abdomen or pelvis of at least six months duration not occurring exclusively with menstruation or intercourse and not associated with pregnancy².

CPP is a symptom, not a disease. It is one of the most common symptoms in patients attending Gynaecology outpatient department. CPP afflicts 5-10% of women³. Prevalence of CPP has been reported as 3.8% in women aged 15-73 which is higher than the prevalence of migraine (2.1%)⁴. CPP is common problem and presents a major challenge to the gynaecologist and other health care providers because of its unclear etiology, complex natural history and poor response to therapy.

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Junu Bajracharya Lecturer, Department of Obstetrics and Gynaecology, Kathmandu Medical College Teaching Hospital, Kathmandu, Nepal E-mail: dr_junu@hotmail.com Diagnosis of the cause of CPP requires multidisciplinary approach as it may arise from any structure related to pelvis including abdominal and pelvic wall.

Various causes of CPP have been identified which are dysmotility disorders including irritable bowel syndrome (50-80%), musculoskeletal disorder (30-70%), urological cause (5-10%), endometriosis and dense adhesion <5%, multiple medical diagnosis <5% and 40-50% of woman with CPP had history of physical and sexual abuse⁵. For the diagnosis of CPP initially proper detailed history of pain, its quality, location, radiation and duration, aggravating and relieving factor, bowel and bladder habits and its impact on the activities of daily living should be considered. Beside this, history of physical and sexual abuse should be taken. Thorough examination and investigation should be done for diagnosis of chronic pelvic pain.

Laparoscopy is one of the investigations which help us in reaching the diagnosis of chronic pelvic pain. It does not only establish the diagnosis but also can modify the treatment.

This study is an attempt to understand the etiology of this complex problem in Nepalese women.

METHODS

This is a descriptive study done in the Department of Obstetrics and Gynaecology of Kathmandu medical college teaching hospital from January 2010 to June 2012. All the cases of CPP admitted for diagnostic laparoscopy were noted from admission records. Thorough history including demographic details were noted. They were followed up after diagnostic laparoscopy and their laparoscopic finding were also noted. Diagnostic laparoscopy was performed under General anaesthesia. Ten millimeter supraumbilical port was made by Hasson's technique and carbon dioxide pneumoperitonem was created. Second port of five mm was created in left side lateral to left rectus muscle under direct vision avoiding the injury to the inferior epigastric vessel . Diagnostic laparoscopy was performed by standard technique and laparoscopic findings were noted. A five mm port was made approximately five centimeters above the second port in cases where intervention was required.

RESULTS

Total 247 cases were posted for laparoscopic procedure. Among these 48 cases were done for CPP during the study period. Ages ranged from 20 to 46 years with the mean age of 33 years.

Table 1: Parity of woman who underwent laparoscopy for chronic pelvic pain

Parity	Numbers (percentage)
Para1	12(25%)
Para2	21 (43.75%)
Para3	12 (25%)
Para>3	3 (6.25%)

Table 2: Laparoscopic findings in chronic pelvic pain

Pelvic pathology	Number of Cases (Percentage)
Endometriosis	19 (55.88%)
Pelvic adhesions	7 (20.58%)
Pelvic congestion	5 (14.70%)
PID	2 (5.88%)
Chronic ectopic	1 (2.94%)
	Total 34

Table 1 shows that 21 out of 48 i.e. almost half of the cases (43.75%) were of parity two. As shown in Table 2, out of 48 cases, 34 (70.83%) cases had pelvic pathology

in which endometriosis was the commonest followed by adhesion, pelvic congestion and pelvic inflammatory disease.

DISCUSSION

CPP, which is one of the major challenges for health professional, needs multidisciplinary approach for care and management of the cases. Proper history, examination should be considered in case of CPP6. Diagnostic laparoscopy is one of the gold standards in the diagnosis of CPP16. By laparoscopic procedure, not only diagnosis but also therapeutic procedure can be done in the same setting. In this study, the cause for CPP was identified in 70.83% which made the management of cases specific and targeted. Chhetri S et al in Diagnostic laparoscopy was able to detect pathology in 45 (81.8%) patients⁶. Similarly study done by Swanton et al shows positive finding in 90%7. Mara et al shows positive diagnostic laparoscopy in 82.3%, Cunnanan et al detected pathology in 82.5%, Marana et al in 80%¹⁰, Kantoravdis et al in 76%¹¹ and Shripad Hebbar et al shows pelvic pathology in 58%¹². Thus laparoscopy helps us to find out the cause of chronic pelvic pain which would be missed if we did not do diagnostic laparoscopy.

Various cause of CPP had been identified in different study done at different places. In our study endometriosis was the commonest cause of chronic pelvic pain which accounted for 52.63% followed by adhesion, congestion, pelvic inflammatory disease and chronic ectopic 21.06%, 15.79%, 5.26%, and 5.26% respectively. In a study by Howard FM et al endometriosis was present in 40 percent of the cases followed by pelvic adhesions, chronic pelvic inflammatory disease, and ovarian cysts⁴. Similarly Razia Iftikar showed 56.6% endometriosis followed by pelvic adhesion in 16.6%, 6.6% benign ovarian cyst and PCOD14. Sharma D et al showed that commonest finding on laparoscopy was adhesions in 40%, endometriosis in 18%, and pelvic congestion syndrome in 20%15. Similarly in a study done by Chhetri S, diagnostic laparoscopy was able to detect pathology in 45 (81.8%) patients. Pelvic adhesions was the most common cause of chronic pelvic pain which was present in 16 (29%) of the women, followed by PID in (12.7%), endometriosis in (9.1%), pelvic congestion (7.2%), pelvic tuberculosis (7.2%), fibroid uterus (7.2%), ovarian cysts in (7.2%) and parafimbrial cyst in 3.4%7.

Shripad Hebbar et al revealed that the most common pelvic pathology by laparoscopy was pelvic adhesions (20.9%), followed by pelvic congestion18.6%¹³. Newham AP et al, shows that 16% of women had endometriosis and pelvic adhesions in 40%¹⁶. Previously it was said that

endometriosis is a disease of developed countries rather than the developing countries. In developing countries, in past there used to be trend of early child bearing, multiple child bearing, prolonged breast feeding but the trend is changing nowadays. Probably this is the reason why high prevalence of endometriosis is seen in this study.

CONCLUSION

Endometriosis was found to be one of the most common causes for chronic pelvic pain in this study. Diagnostic laparoscopy should be considered in all the cases of chronic pelvic pain as it is a useful modality in the diagnosis and treatment of chronic pelvic pain.

REFERENCES

- Merskey H, Bogduk N (Eds). Classification of Chronic Pain. 2nd ed. Seattle: IASP Press; 1994. 209-214p.
- Royal college of obstreticians and gynaecologists. Guideline No 41 The initial management of Chronic Pelvic Pain. [Internet]. May 2012. Available from: http://www.rcog.org.uk/files/rcog-corp/CPP_ GTG2ndEdition230512.pdf
- 3. Reiter RC.A profile of women with chronic pelvic pain. Clin Obstet Gynecol. Mar 1990;33(1):130-6.
- 4. Howard FM. Chronic pelvic pain. Obstet Gynecol. 2003;101(3):594-611.
- 5. Reiter RC. Evidence based management of chronic pelvic pain. Clin Obstet Gynecol 1998;41:422–435.
- El- Mowafi DM. Laparoscopic management of endometriosis. In progress in Obstetrics and Gynaecology. New Delhi: Churchill Livingstone; 2006. 345p. 17 vol.
- 7. Chhetri S, Khanna S, Poonam, Sen B. Laparoscopic Evaluation of Chronic Pelvic Pain in Women. J Nepal Health Res Counc. April 2009;7(14):45-8.
- 8. Swanton A, Iyer L, Reginald PW. Diagnosis, treatment and follow up of women undergoing conscious pain mapping for chronic pelvic pain: a prospective cohort study. BJOG. 2006;113:792-96.

- 9. Mara M, Fucikova Z, Kuzel D, Dohnalova A, Haakova L, Zivny J. Laparoscopy in chronic pelvic pain—a retrospective clinical study. Ceska Gynekol. 2002;67(1):38-46.
- Cunanan RG, Norman MD, Courey NG, Lippes J. Laparoscopic findings in patients with pelvic pain. Am J Obstet Gynecol. 1983;146:589-591.
- 11. Marana R, Paielle FV, Muzii L, Dell'Acqua S, Mancuso S. The role of laparoscopy in the evaluation of Chronic Pelvic Pain. Minerva Ginecol. Jun 1993;45(6):281-86.
- Kontoravdis A, Hassan E, Hassiakos D, Botsis D, KontoravdisN, Creatsas G. Laparoscopic evaluation and management of chronic pelvic pain during adolescence. Clin Exp Obstet Gynecol. 1999;26(2):76-77.
- 13. Hebbar S, Chawla C. Role of laparoscopy in evaluation of chronic pelvic pain. J Minim Access Surg. September 2005;1(3):116–120.
- 14. Razia iftikhar. Outcome of laparoscopy in chronic pelvic pain. JSP (International). 2008;13(4):155-158.
- 15. Sharma D, Dahiya K, Duhan N, Bansal R. Diagnostic laparoscopy in chronic pelvic pain. Arch Gynecol Obstet. Feb 2011;283(2):295-7.
- 16. Newham AP, van der Spuy ZM, Nugent F. Laparoscopic findings in women with chronic pelvic pain. S Afr Med J. 1996 Sep;86(9 Suppl):1200-3.