http://www.banglajol.info/index.php/JNINB

Original Article

DOI: http://dx.doi.org/10.3329/jninb.v4i2.38928

Journal of National Institute of Neurosciences Bangladesh,
July 2018, Vol. 4, No. 2, pp: 129-132

ISSN (Online) 2518-6612
ISSN (Print) 2410-8030

Clinical Profiles of Pelvic Inflammatory Disease Patients: Experience of 150 Cases at a Tertiary Care Hospital in Dhaka City

Nadira Khan[1], Firoza Rahman[2], Nilufar Jahan[3], Rahela Khatun[4], Nebadita Saha[5]

[1]Senior Consultant, Family Planning Model Clinic, Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh; [2]Emergency Medical Officer, Dhaka Medical College Hospital, Dhaka, Bangladesh; [3]Medical Officer, Family Planning Model Clinic, Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh; [4]Junior Consultant (Gynaecology & Obstetrics), National Institute of Cancer Research & Hospital, Dhaka, Bangladesh; [5]Medical Officer, Family Planning Model Clinic, Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh

[**Received:** 2 March 2018; **Revised on:** 10 April 2018; **Accepted on:** 22 May 2018; **Published on:** 1 July 2018]

Abstract

Background: Pelvic Inflammatory disease is presented with different clinical presentation among the sexually active women. Objectives: The purpose of the present study was to see the clinical profiles of women presented with pelvic inflammatory diseases. Methodology: This cross-sectional study was carried out in the Department of Obstetrics and Gynaecology at Dhaka Medical College Hospital, Dhaka, Bangladesh from November 2001 to April 2002 during the period of six (06) months and December 2002 to February 2003 for three (03) months with the total duration of nine (09) months. Women at any age who were suffering from chronic pelvic inflammatory disease (PID) attended at the OPD of gynecology Department at Dhaka Medical College Hospital, Dhaka, Bangladesh were selected as study population. Epidemiological aspects and clinical presentation have been mainly highlighted in this study. Result: A total number of 150 cases were recruited for this study. Among 150 case of chronic pelvic inflammatory disease (PID) majority of the patients (54%) belonged to the age group of 26 to 35 years of age group followed by 16 to 25 years which was 33.3% cases. Majority 96.0% patients had pain in the lower abdomen; 78.6% cases had backache; 76.6% cases had dyspareunia; 64.0% had congestive dysmenorrhea and 60.0% cases had vaginal discharge. Regarding menstrual problems, 72.7% cases had dysmenorrhea. Majority (84.0%) cases were multipara. Conclusion: In conclusion lower abdominal pain, backache, dyspareunia, congestive dysmenorrhea are the major complaints among the PID patients. *[Journal of National Institute of Neurosciences Bangladesh, 2018;4(2): 129-132]*

Keywords: Clinical Profiles; PID; abdomeninal pain; backache; dyspareunia; congestive dysmenorrhea

Correspondence: Dr. Nadira Khan, Senior Consultant, Family Planning Model Clinic, Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh; Email: ashabori2003@yahoo.com; Cell no.: +8801711275426

Conflict of interest: There is no conflict of interest relevant to this paper to disclose.

Funding agency: This research project was not funded by any group or any institution.

Contribution to authors: Khan N & Rahman F have involved from protocol preparation up to report writing. Jahan N, Khatun R, Nebadita Saha N have also prepared the manuscript and have revised it.

How to cite this article: Khan N, Rahman F, Jahan N, Khatun R, Saha N. Clinical Profiles of Pelvic Inflammatory Disease Patients: Experience of 150 Cases at a Tertiary Care Hospital in Dhaka City. J Natl Inst Neurosci Bangladesh, 2018;4(2): 129-132

Introduction

Pelvic inflammatory disease (PID) is a global problem and it is common both in developed and developing countries[1]. The exact incidence of PID is unknown because the disease cannot be diagnosed reliably from clinical symptoms and signs. PID is often asymptomatic or subclinical[2]. Hospital discharge registries are poor surrogate markers for the true prevalence of PID. In USA, an estimated one million women are treated each year for PID and at least one fourth of these suffer from serious sequelae including infertility, ectopic pregnancy, chronic pelvic pain and requires major abdominal and pelvic surgery[3].

In western countries the origin of pelvic inflammatory disease is due to sexual abuse[4]. On the other hand in third world countries like ours, unsafe delivery and abortion play main role in the development of pelvic inflammatory diseases. Sequelae of PID can sometimes be very pathetic, as it causes subfertility which is a very gloomy event in reproductive health of a woman, as well as for her family life[5]. It can cause pelvic and generalized peritonitis, septic shock; chronic pelvic pain which disturbs day to day activities of a woman. PID can cause dyspareunia which disturbs marital harmony.

It may also cause ectopic pregnancy, pelvic abscess and tubo-ovarian mass necessitates major surgeries by which mortality and morbidity is further increased[6]. The most important presenting feature is chronic pelvic pain of varying magnitude. This present study was undertaken to see the clinical profiles of women presented with pelvic inflammatory diseases.

Methodology

This study was designed as descriptive cross-sectional study. It was carried out in the Department of Obstetrics and Gynaecology at Dhaka Medical College Hospital, Dhaka, Bangladesh from November 2001 to April 2002 during the period of six (06) months and December 2002 to February 2003 for three (03) months with the total duration of nine (09) months. Women at any age who were suffering from chronic pelvic inflammatory disease (PID) attended at the OPD of gynecology Department at Dhaka Medical College Hospital, Dhaka, Bangladesh were selected as study population. Clinically the patients were diagnosed with the presence of at least three of the symptoms like chronic pelvic pain or backache, deep dyspareunia, congestive dysmenorrhea, menstrual irregularities as well as the signs like lower abdominal tenderness, cervical motion tenderness and adnexal tenderness with or without thickening of fornices or mass. Epidemiological aspects and clinical presentation have been mainly highlighted in this study. Relevant data from each patient were recorded in a questionnaire. Data were analyzed by SPSS version 21.0 software package. All data were recorded systematically in a preformed data collection sheet. The quantitative data were expressed as frequency and percentage and the quantitative data were expressed as mean with standard deviation.

Results

A total number of 150 cases were recruited for this study. Among 150 case of chronic pelvic inflammatory disease (PID) majority of the patients (54%) belonged to the age group of 26 to 35 years of age group followed by 16 to 25 years which was 33.3% cases (Table 1).

Table 1: Age distribution among the Study Population (n= 150)

Age Group	Frequency	Percentage
16 to 25 Years	50	33.3
26 to 35 Years	81	54.3
More Than 35 Years	19	12.4
Total	**150**	**100.0**

Majority 96.0% patients had pain in the lower abdomen; 78.6% cases had backache; 76.6% cases had dyspareunia; 64.0% had congestive dysmenorrhea; 60.0% cases had vaginal discharge; 16.7% cases had painful defaecation and 6.7% cases had complaints of sterility (Table 2).

Table 2: Presenting complaints of the patients

Presenting complaints	Frequency	Percentage
Pain in the lower abdomen	144	96.0
Backache	118	78.6
Dyspareunia	115	76.6
Congestive dysmenorrhoea	96	64.0
Vaginal discharge	90	60.0
Painful defaecation	25	16.7
Sterility	10	6.7

Regarding menstrual problems, 20.0% had menorrhagia; 6.7% cases had polymenorrhoea; 2.7% cases had polymenorrhagia; 4.0% cases had amenorrhea and 72.7% cases had dysmenorrhea (Table 3).

Table 3: Menstrual problems of the patients (n= 150)

Menstrual problems	Frequency	Percentage
Dysmenorrhoea	109	72.7
Menorrhagia	30	20,0
Polymenorrhoea	10	6.7
Amenorrhoea	6	4.0
Polymenorrhagia	4	2.7

Out of 150 cases, majority 84.0% cases were multipara and 32.7% cases were grand multipara (Table 4).

Table 4: Parity Status among the PID patients (n= 150)

Parity	Frequency	Percent
0	4	2.7
1	20	13.3
2-5	77	51.3
>5	49	32.7
Total	**150**	**100.0**

Discussion

Clinical features may vary in developed countries, where, PID is more common among women with multiple sexual partners and women who report a history of STD compared with those with no STD history[7]. The most important presenting feature is chronic pelvic pain of varying magnitude. The worldwide increase in the incidence of PID during the past few decades has led to the secondary epidemics of tubal factor infertility and ectopic pregnancy. The

sequelae of PID account for a large proportion of the morbidity associated with sexually transmitted infections and the direct and indirect costs associated with PID are enormous. It is common in 25-35 years of age. It has got definite relationship with parity of the patients. A detailed and methodical study of 150 cases in this series shows highest (54.3%) incidence of this disease being in the age group of 26-35 years. Peterson et al[8] also showed that women with PID are usually under the age of 25 years. Bartlett et al[9] showed that 87 percent of the patients belong to the age group 20-35 years. There is similarity between this last study which was conducted in India, with the present study. Laila[10] also showed that 55.21% of her patients were in the age group of 26-35 years. PID occurs more in younger age group in western countries where the disease is mainly STD-related, but in developing countries, it is mostly non-STD related and occurs in later age group.

Younger age is marked by biological characteristics conductive to the development of PID, such as a lower prevalence of protective chlamydial antibody, larger zone of cervical ecotypy and greater permeability of cervical mucosa[11]. A correlation between early coital indulgence and promiscuous sexual relationship might explain the very high saplingitis incidence in sexually active teenage girls. However, STD is less important for development of PID in the somewhat older women. In this age group of patients and also in women who have had two or more episodes of PID, anaerobic bacteria is thought to be the aetiological agent. The reason behind this may be the post PID fallopian tubes are more vulnerable to infections by anaerobes[12]. Anatomic changes induced by pregnancy and delivery contribute to an easier access to the vagina for bowel flora[13]. This may lead to an increased occurrence of a type of non-veneral PID in women of comparatively higher age.

Regarding parity 84.3 percent of patients were multiparous, 75.4 percent were delivered at home, conducted by untrained birth attendants in 63 percent cases. Among them 54.1 percent cases were complicated by puerperal sepsis. Laila[10] also showed that 56.21 percent of her patients had history of puerperal sepsis. This entails the pathophysiological aspect of PID. Peterson et al[8] showed that PID occurred mostly in multipara. But another study by Westrom et al[12] revealed that 74.4 percent of PID cases were nulliparous mostly acute cases. These studies therefore, showed that in developing countries the majority of cases were older parous women and in the industrialized countries the majority were younger nulliparous women. As it has already been proved that STD has an important role in aetiology of PID, the former being related to the sexual activity of a woman and the number of her sexual partners. A survey on the sexual behaviour of USA college girls showed that during the last two decades, there has been a gradual rise in premarital sex amongst them[6]. Such a change explains the prevalence of STD and hence PID in young nulliparous women.

Majority of rural women depend primarily on untrained or relatively less trained birth attendants and relatives for child birth assistance. They conduct the delivery process in very unhygienic environment, never use any sterile gloves and conduct repeated pelvic examinations even after rupture of the membrane. This gives an opportunity for potential pathogens to pass from the lower genital tract into the normally sterile environment of uterus. It is more common, however, for the infection to remain localized in the pelvis and if effective treatment is not given immediately, there is a danger of chronic pelvic infection with tubal blockage. In a maternal morbidity study, it has been found that 16.7 percent women reported symptoms of PID at postpartum period[14].

Major symptoms for which the patients of this series reported to the obstetric and gynaecological outpatient department, Dhaka Medical College Hospital, in order of frequency, are lower abdominal pain (96.0%), backache (78.6%), dyspareunia (76.6%) congestive dysmenorrhoea (64%), vaginal discharge (60%) and sterility (6.7%), they also complained of menstrual abnormalities in the form of menorrhagia (20%), polymenorrhoea (6.7%), polymenorrhagia (2.7%), dysmenorrhoea (72.7%). Laila[10] showed that 95.31 % of her patients had chronic lower abdominal pain; Sultana[15] showed that all her patients had lower abdominal pain. Bartlett et al[9] showed that the most frequent clinical symptoms was some form of menstrual disturbances, 48 percent of the women complained of lower abdominal pain, 31.1 percent experienced vaginal discharge. Sterility was found in 25 percent cases. Kochar et al[16] in his study showed that lower abdominal pain was the most common reported symptom.

Congestive dysmenorrhea occurs due to pelvic congestion associated with premenstrual vascular engorgement. Backache is due to chronic cellulitis in uterine ligaments and becomes exaggerated during menstruation. There may be menorrhagia due to congestion and at times epimenorrhagia due to ovarian involvement. In 35% of patients there may be irregular

intermenstrual bleeding.

Patient may complain of either unilateral or bilateral mass in the lower abdomen. The mass may be tuboovarian mass, pyosalpinx or hydrosalpinx. Patient may complain of infertility which is generally secondary in type. The factors causing infertility are cornual block, loss of cilia, loss of peristalsis due to thickening of tubal wall, closure of the abdominal ostium and distortion of the tube due to peritubal adhesion[11]. Patient may complain of deterioration of general health due to presence of a septic foci. The past or recent presence of intrauterine contraceptive device is corroborative. An increasing number of women with PID will not have classical features. Chlamydia as well as gonococci will be found in asymptomatic women.

The pain is dull in nature and continuously present over the both lower abdominal quadrants. The pain aggravates prior to and during menstruation due to congestion. Pain is also increased with movement, coitus and micturation. There may be a sensation of pelvic pressure radiating down one or both legs[15]. Dyspareunia is deep seated and occur due to the pelvic cellulites, especially when there is involvement of uterosacral ligament. The vaginal discharge is almost a constant manifestation. The discharge is mucoid or mucopurulent in nature. It is related to the congestion and associated cervical pathology.

Conclusion

In conclusion lower abdomeninal pain, backache, dyspareunia, congestive dysmenorrhea, vaginal discharge and painful defaecation are the major complaints among the PID patients. Regarding menstrual problems, polymenorrhagia, amenorrhea and dysmenorrhea are the most common. Furthermore multiparous women are mostly affected by PID. Large scale study should be carried out to get the actual picture about the PID among the Bangladeshi women.

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