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CLINICAL FEATURES OF PELVIC INFLAMMATORY DISEASE IN GOMBE, NIGERIA.

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ABSTRACT

The objective of the study was to evaluate the symptoms and signs of pelvic inflammatory disease among women attending gynaecological clinics. It was a retrospective study of the clinical features presented by the patients over a one year period. Four hundred and eighty-nine cases of pelvic inflammatory disease were reviewed. Abnormal vaginal discharge was the commonest symptom occurring in 411 (84.1%) patients and was associated with vulval pruritus and a foul smell in 77.3% and 40.9% of cases respectively. Four hundred and six (83.0%) patients had lower abdominal pains, while dysmenorrhoea and dyspereunia occurred in 52.4% and 45.4% respectively. Uterine, adnexal and lower abdominal tenderness were the commonest demonstrable physical signs in 69.3%, 69.3% and 64.8% of cases respectively. Although fullness in the pouch of Douglas was not common (4.5%) pelvic ultrasound scan detected collection there in 48% of cases.

KEYWARDS: Clinical features, Pelvic inflammatory disease.

INTRODUCTION

Pelvic inflammatory disease (PID) is a common disorder among women attending gynaecological clinics worldwide[1]. Ten per cent of American women of reproductive age group have received treatment for PID[2]. It may present in its acute, subacute or chronic forms and must be distinguished from other acute gynaecological conditions and causes of lower abdominal pain. This is particularly important to ensure vigorous treatment of the disease promptly as it may otherwise give rise to long-term complications such as infertility, chronic pelvic pain or ectopic gestations[3]. This may arise because of failure to seek prompt medical attention, inappropriate or inadequate antibiotic treatment that may arise from wrong diagnosis or lack of investigative facilities. Beyond the clinical features, endometrial biopsy and laparoscopy may be required to reach a diagnosis of PID[4]. However, the condition is often treated with trial antibiotics without any investigations[5].

PID may be asymptomatic or may present with atypical symptoms[6]. The definitive diagnosis is by laparoscopic illustration of tubal hyperaemia, oedema and/or peritubal exudates[7], as well as isolating micro-organisms from endocervical swabs or swabs taken from the tubal exudates at laparoscopy. The former is not a routine diagnostic method and is not available to majority of health facilities in the Tropics, neither are reliable microbal culture facilities. There is hence no substitute to a high index of suspicion and accurate clinical diagnosis in the management of PID in developing countries, it is thus essential to evaluate the clinical features of the disease. The objective of the study was to evaluate the clinical mode of presentation of pelvic inflammatory disease among women attending gynaecological clinics at the Federal Medical Centre Gombe, Nigeria.

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SUBJECTS AND METHODS

A retrospective study of the clinical features presented by patients diagnosed with pelvic inflammatory disease at the Federal Medical Centre Gombe over a one-year period, from July 2000 to June 2001, was conducted. The patients' case notes were retrieved, both the history and physical examination findings leading to the diagnosis of the condition were entered into a precoded spread sheet and analysed by SPSS statistical package.

RESULTS:

All case notes of the four hundred and eighty-nine patients diagnosed to have pelvic inflammatory disease were reviewed. Table I shows that majority, 68.8% (333/489), of the patients had some formal education, although 43.1% (211/489) were unemployed. There were only 22 (4.5%) students among the patients. There was an equal number of divorcees and single women each comprising 6.7%(33/489) of the patients, the majority (86.4%) were married.

Abnormal vaginal discharge was the commonest symptom occuring in 411.(84.1%) patients, followed by lower abdominal pains, vulval itching, dysmenorrhoea and inability to conceive in 83%, 77.3%, 52.4% and 50 of the patients respectively as shown on table 2. Constitu nal symptoms were not common, with vomiting occurring in ly 50 (10.2%) patients. The commonest menstrual abnormality reported was menstrual irregularity in 18.2% (89/489) followed by menorrhagia and oligomenomboea 28 and 22 patients respectively.

The abnormal vaginal discharge was foul smelling in 200 patients (40.9%). The commonest findings on physical examination were uterine and adnexal tenderness on bimanual pelvic examination, each occuring in 339 patients (69.3%) and closely followed by lower abdominal tenderness in 317 patients (64.8%) as shown on table 4. Although fullness in the pouch of Douglas was not commonly detected (4.5%) pelvic ultrasound scan showed collection there in 48% of cases.

Table 1: **Social Factors**

FACTORS	FREQUENCY	%
Education		
Primary	50	10.2
Secondary	172	35.2
Post-secondary	111	22.7
Nil	156	31.9
Total	**489**	**100**
Occupation		
Unemployed	211	43.1
Trader	78	15.9
Junior civil servant	128	26.1
Senior civil servant	50	10.2
Student	22	4.5
Total	**489**	**100**
Marital Status		
Single	33	6.7
Married	423	86.5
Divorced	33	6.7
Total	**489**	**100**

Table 2: **Symptoms And Mestrual Abnornalities**

SYMPTOMS	FREQUENCY	%
Abnormal vaginal discharge	411	84.1
Lower abdominal pains	406	83.0
Vulval itching	378	77.3
Dysmenorrhoea	256	52.4
Infertility	245	50.1
Dyspereunia	222	45.4
Menstrual abnormality	161	32.9
Fever	133	27.2
Vomiting	50	10.2
TYPE OF MENSTRUAL ABNORMALITIES		
Irregular	89	18.2
Menorrhagia	28	5.7
Oligomenorrhoea	22	4.5
Polymenorrhoea	16	3.3
Intermenstrual bleeding	6	1.2
No menstrual abnormality	328	67.1
Total	**489**	**100**

Table 3: **Characteristics Of Abnormal Vaginal Discharge**

COLOUR	FREQUENCY	%
Curdy white	124	25.4
Mucoid	99	20.2
Creamy	64	13.1
Not specified	124	25.4
No abnormal vaginal discharge	78	15.9
Total	**489**	**100**

Table 4: **Physical Signs**

Physical Signs	FREQUENCY	%
Uterine tenderness	339	69.3
Adnexal tenderness	339	69.3
Lower abdominal tenderness	317	64.8
Renal angle tenderness	100	20.5
Adnexal mass	50	10.2
Bogginess in the pouch of Dauglas	22	4.5

DISCUSSION

Various studies have been conducted to determine the factors required for the diagnosis of pelvic inflammatory disease, these have utilised both clinical features as well as laboratory results[8, 9, 10]. However, an analysis of these symptoms, physical signs and laboratory data has failed to reliably predict PID[11]. The most common symptoms used for diagnosis of PID among the patients we studied were abnormal vaginal discharge in 84.1% followed by lower abdominal pains, vulval itching and dysmenorrhoea in 83%, 77.3% and 52.4% respectively. These correlate with those advocated by the earlier authors[8, 9, 10]. Endometritis is usually the initial lesion caused and is associated with irregular vaginal bleeding[12]. Irregular menstruation was the commonest menstrual abnormality found in our patients followed by menorrhagia. We therefore also advocate that the diagnosis of PID should be considered in all patients with genitourinary symptoms such as lower abdominal pains, abnormal vaginal discharge, menorrhagia, fever/chills and urinary symptoms[4].

It is also important to evaluate the secretions from both the vagina and endocervix. In this study the abnormal vaginal discharge were foul smelling in 48.6% of patients, curdy white in 25.4% and creamy in 13.1%. It is advocated that vaginal secretions should be evaluated for leukorrhea and clue cells, the endocervix should be evaluated for mucopurulent (greenish-yellow) discharge, hyperaemia, oedema and friability[4], these were not all documented in our patients. Leukorrhea in wet smears of the vaginal secretions is a peculiar finding in women with PID[13] and could be used to exclude PID in women with abdominal pain[4]. Endometritis is also commonly associated with salphingitis[14, 15, 16], thus histologic diagnosis of acute or chronic endometritis following endometrial biopsy confirms a diagnosis of PID. These patients may particularly benefit from the histologic diagnosis in the face of limited facilities for microbial culture (unpublished data).

Fever and vomiting were among the minor criteria identified for the clinical diagnosis of PID[7], although these were not common in the population we studied with vomiting occurring in 10.2% only. This may be because most of our patients did not present with acute PID or might have started self medication with antibiotics prior to presentation.

This study shows that the commonest findings on bimanual pelvic examination were uterine and adnexal tenderness each occurring in 339 patients (69.3%), closely followed by lower abdominal tenderness in 317 patients

(64.8%). These are among the pointer-signs of PID[9,1 6]. Pelvic tenderness may connote tubo-ovarian abscess. Ovarian involvement may occur by inoculation of the pathogen into the ovarian stroma from the fallopian tubes through an ovulation site resulting in the formation of a tubo-ovarian mass, a condition that complicates 15% of PID[17]. The diagnosis of PID is usually made in conjunction with the presenting symptoms, with the suggestion that a minimum of three criteria with supportive signs, laboratory tests or both are required to improve the diagnosis[13]. But, once the physical signs of pelvic organ tenderness are elicited, a diagnosis of PID may be made even in the asymptomatic patient[4]. The above symptoms and the findings at bimanual pelvic examination of uterine, adnexal and cervical excitation tenderness could therefore be collectively used to manage the patient after further evaluation as was done in our patients.

Further evaluation may involve utrasonography, which correlates with laparoscopy in patients with severe PID, but is of limited value in those with atypical or mild symptoms[18]. Laparoscopy however, remains the gold standard in the diagnosis and management of acute PID, although the is not routinely necessary. The minimal visual requirement for the diagnosis of PID at laparoscopy being tubal hyperaemia, tubal oedema and sticky peritubal exudates[7].

CONCLUSION

The clinical features of PID are fairly straight forward and often glaring. The commonest symptoms are abnormal vaginal discharge, lower abdominal pains dysmenorrhoea and dyspereunia. The clinical signs commonly include lower abdominal, adnexal and uterine tenderness.

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