ORIGINAL ARTICLE J. Med. Sci. (Peshawar, Print) January 2010, Vol. 18, No.1: 8-10

SYNDROMIC MANAGEMENT OF PELVIC INFLAMMATORY DISEASE

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ABSTRACT

Objective: To know the efficacy of Syndromic approach in the management of Pelvic Inflammatory Disease in our setup.

Material and Methods: The study was conducted on 150 patients both in private hospital and department of Obstetrics and Gynaecology, Khyber Teaching Hospital, Peshawar, Pakistan. Patients with signs and symptoms of mild to moderate Pelvic Inflammatory Disease were included in this study. Diagnosis and treatment were done in a single visit according to the WHO criteria. These patients were reevaluated after 1 week for improvement.

Results: Patients were aged from 20-50 years. Most of the patients presented with multiple symptoms relating to the female reproductive tract. On examination multiple signs were present. Out patient management was given to all patients while 97(65%) patients returned for evaluation after one week of completion of therapy, 94(96%) patients showed improvement on examination.

Conclusion: The syndromic approach to management of Sexually Transmitted Diseases (STD's) and their complications provides an effective method of diagnosis and treatment without delay.

Key words: Syndromic approach, Sexually, Disease, Transmitted, Pelvic, Inflammatory.

INTRODUCTION

Pelvic inflammatory disease (PID) is defined as the acute clinical syndrome associated with ascending spread of micro organisms from the vagina or cervix to the endometrium, fallopian tube or contiguous structures, causing endometritis, salpingitis, parametritis, oophoritis, tubo ovarian abscess and pelvic peritonitis. The public health significance of PID is indisputable with up to one in nine American women of reproductive age reporting that they have received treatment for pelvic infection[1]. The incidence of PID in the developing world is more difficult to assess, available data often being based on point prevalence studies of different sexually transmitted diseases (STD) but rates of 6-19% have been reported in African countries. PID is predominantly a disease of young sexually active women. Differences in the male and female anatomy and reproductive physiology account for greater risk of complications of PID in women and also for greater difficulty in differential diagnosis of urogential infection in women. Several PID pathogens have predilection for urethra, cervix and rectum simultaneously producing variable symptoms with a wide range of differential diagnostic possibilities[2]. Even when PID is diagnosed, the exact etiological agent is difficult to identify by clinical examination alone, as most of them can infect any part of the reproductive tract. Delay of only a few days in receiving appropriate treatment markedly increases the severity of the condition and the risk of long term sequelae such as ectopic pregnancy, sub-fertility and pelvic pain[3, 4].

The organisms causing PID usually infect part or whole of the genital tract producing variable presentations. Infections such as Chlamydia Trachomatis and Neisseria Gonorrheae have been identified as the causative agents. Gardnerella vaginalis, Mycoplasma genitalium, anaerobes and other organisms which are considered as part of normal flora of the genital tract are also implicated[5]. The accurate diagnosis of each of these causative agents requires investigation, culture, gram stain, fluorescent antibody and nucleic acid amplification test (NAAT). Many poor countries however have neither enough money, trained medical personnel nor laboratory resources[6]. The World Health Organization has promoted the syndromic management of detecting and treating sexually transmitted diseases and genital tract infections, an approach which promotes immediate diagnosis and treatment without expensive and time consuming laboratory tests.

MATERIAL AND METHODS

A prospective non randomized study was conducted at a private clinic at Habib Medical Centre

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A thorough history was taken about their presenting complaints. Abdominal and pelvic examination including speculum and bi-manual pelvic examination were done in each case. Only those patients were included in the study who were suitable for out patient management.

The inclusion criteria included lower abdominal pain, deep dyspareunia, abnormal cervical or vaginal discharge and cervical excitation or adnexal motion tenderness. The exclusion critria included tubo-ovarian mass, temp > 38°C, recent child birth or abortion, rebound tenderness or guarding and vaginal bleeding.

Most of the patients were sexually active young women. Due to the cultural environment of our province it was decided not to get a detailed sexual history of both the patient or her partner.

Outpatient antibiotic treatment regimen which covered Neisseria gonorrheae, Chlamydia Trachomatis and anaerobic organism was used (Oral ofloxacin 400mg twice daily plus oral metronidazole 400mg twice daily for 14 days). It was started as soon as the diagnosis was suspected. Patients were re-evaluated at one week after completion of treatment. Cessation of abdominal pain, dysuria, dyspareunia and disappearance of abnormal cervical discharge and adnexal motion tenderness were considered as success of treatment.

RESULTS

The age range and number of patients is shown in Table 1.

The presenting symptoms included vaginal discharge in 127(85%), abdominal pain in 118 (79%), deep dyspareunia in 75(50%), dysuria in 90(60%) and irregular menstrual cycle in 52(35%); most of the patients had multiple symptoms.

Muco pus discharge from cervix was seen in 127(85%) with profuse discharge in 90(60%) patients, and pain during examination was found in 117(78%) patients.

Of a total of 150 patients, only 97 patients came for followup after one week post completion of treatment. Of these 94 (96%) patients showed subjective and objective improvement.

Table 1: Age range of the patients

Age in Years	No. of patients (%)
20-30	60 (40%)
31-41	83 (55%)
41-50	7 (5%)

DISCUSSION

Through out the world, etiological diagnosis which depends on laboratory results to identify diseases and determine treatment has been standard diagnostic method for formal health care providers. In setting where laboratory tests are unavailable or unaffordable, practitioners rely on their experience with STD infected patients to determine through history and examinations which STD is causing the symptoms. This is called clinical diagnosis and the research has shown it to be of limited value in diagnosing STD's.

The classical clinical approach based on etiological treatment has never been achieved by the developing countries[7]. In 1988, WHO began promoting an alternative to both etiologic and clinical diagnosis, which was more appropriate for conditions in resource poor settings. This is called Syndromic Management. It offers immediate diagnosis and treatment without requiring expensive and time consuming laboratory tests or advanced medical skills.

In the absence of an etiological test for the diagnosis of individual organism, the syndromic approach has been developed as an effective and appropriate case management strategy[8].

In the syndromic approach main STD/PID causing organisms are classified by clinical syndrome. Algorithms guide diagnoses and treatment, which are developed according to local organism prevalence. The patients are treated for all major causes of the syndrome. It is used where laboratory services are not available. The accuracy improves when supplemented with simple laboratory tests. Specialized equipment is not necessary for diagnosis. At the heart of Syndromic management is recognition of the need to diagnose and treat STD at first point of contact with patient. Diagnosis and treatment are provided in a single visit and referral is not needed in many cases. However it is useful only in symptomatic patients and results in over treatment.

The clinician who uses the syndromic approach bases his/her diagnosis and treatment upon a syndrome, group of clinical findings and patient's symptoms rather than identification through testing of specific diseases. In resource poor countries the use of syndromic approach is appropriate for high risk groups and symptomatic individuals. However it is still a poor screening approach when applied to asymptomatic cases. Although the approach is simplest in design its successful implementation requires regular monitoring, evaluation of protocols as well as supervision and training of individuals[9].

In this study 97 patients returned for followup after completing the treatment. Of these, 94 patients showed both subjective and objective improvement on examination. Similar results of 92-96% were also shown by Sharma and Malhotra while comparing the efficacy

of different antibiotic regimes in the management of PID[10,11]. The antibiotic regimes used were different to the one used in this study.

1. Ciprofloxacin 500 mg + Tinidazole 600 mg twice daily for 7 days, cost 400 rupees, efficacy 96%.
2. Fluconazole 150 mg + Azithromycin 1 g + Secnidazole 2 g, single dose, cost 330 rupees, efficacy 93%.
3. Doxycyline 100 mg twice daily + Metronidazole 200 mg trice daily for 7 days, cost 300 rupees, result 91.3%.

In our study we used Ofloxacin 400 mg + Metronidazole 400 mg twice daily for 14 days, cost 450 rupees efficacy 96%. (It covers Neisseria gonorrheae, Chlamydia trachomatis and anaerobic infections[12,13,14.]). Although it is slightly expensive than some regimes but has a higher efficacy.

The standard test for the detection of Neisseria gonorrhea is gram staining of prepared slides which cost 100 to 150 rupees and that for Chlamydia trachomatis is PCR which is not available in NWFP and cost more than 1000 rupees. The cost of these tests and the delay in starting treatment was avoided in patients.

The drop out (50 patiens, 35%) in our study could be multifactorial; prevailing law and order situation given the global war on terror, poor transport facilities, poverty and failure of the patient to returned when they get better.

CONCLUSION

In resource poor countries, such as ours, also where the true incidence of different pelvic infections is not known the syndromic management of patients with symptoms and signs of pelvic inflammatory disease provide an effective management of patients without any delay.

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