ORIGINAL RESEARCH PAPER

Volume-8 | Issue-7 | July - 2019 | PRINT ISSN No. 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

PELVIC INFLAMMATORY DISEASE AND ITS EVALUATION WITH LOWER BACKACHE AND ITS OUTCOME IN FEMALES ATTENDING OUTPATIENT DEPARTMENT OF TERTIARY CARE TEACHING HOSPITAL

Gynaecology

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ABSTRACT

Background- Pelvic inflammatory disease (PID) is one of the most frequent infections seen in reproductive age women and is associated with major clinical problem like low backache.

Objective- To study the incidence of pelvic inflammatory diseases of lower backache in females and its association with treatment plan and Outcome.

Methods- A prospective epidemiological study was done on 200 female patients in the department of obstetrics and gynaecology along with Orthopaedics of Rama Medical College, Mandhana, Kanpur, India during the period from September 2018 to May 2019. Patients were divided into 2 groups as per their complaints. Group 1 included patients with PID and Group 2 included without PID. Epi-info 7 was used for analysis.

Results- Out of 200 female patients 128 were diagnosed as pelvic inflammatory disease as the under lying pathology along with backache that comprised of 64% of the study group. Maximum number of patients of backache with discharge per vagina was of age group of >40 years which makes them 50% of the total patients of backache.

Conclusion- Pelvic inflammatory disease is a major risk factor causing the low backache in patients and hampering their day to day activities.

KEYWORDS

Backache, PID, Epidemiological, Vaginal discharge.

INTRODUCTION-

Low back pain is a chief public health problem all over the world. Most people suffer devastating back pain at some stages in their lives. On any given day, an estimated 6.5 million people in the United States are bed-ridden because of back pain and approximately 1.5 million new cases of back pain are pursued by physicians in each month. There has been growing apprehension about the low back disability in western society.[1] In India, incidence of low back pain is also alarming; nearly 60 percent of the people in India have significant back pain at some time or the other in lives.[2] Pelvic inflammatory disease (PID) is defined as the inflammation of the upper genital tract including the uterus, Fallopian tube, ovaries, and the pelvic peritoneum. If the disease is left untreated, it could result in serious consequences such as infertility, ectopic pregnancies, chronic abdominal pain, and internal pelvic scarring.[3,4] PID is common public health problem with grave consequence on women's health and wellbeing. Other than the chronicity of lower abdominal pain, dull aching backache damage the women's wellbeing.[5] Though few studies suggest that 24-32% women in India suffer from PID, but we do not have satisfactory information on extent, distribution and determinants of PID and other gynaecological morbidities in developing countries.[6] So, the rationale behind this study was to determine the incidence PID in females having lower backache and its association with birth control methods.

MATERIALS AND METHODS-

Study Design- Prospective parallel assignment Cross Sectional study

Study Settings- outpatient department of Obstetrics and Gynaecology and Orthopaedics, Rama Medical College and Hospital

Study Duration- September 2018 to May 2019 (9 months)

Study Population- all the females attending the OPD during the study period.

Inclusion Criteria-

Patients were thoroughly interviewed and physically examined in the presence of female attendant to determine the underlying cause of backache. Those having backache were included in the study.

Exclusion Criteria-

Patients having clear signs of disc prolapse, tuberculosis of spine or any other spinal disease were being excluded from the study.

Sample Size- 200 female patients were studied during the study period.
Sampling Technique- Purposive sampling technique.

Methodology-

The study was divided into two groups: Group 1included patients with PID diagnosed by Gynaecologist and Group 2 included patients with no PID only lower backache. Follow up of the patients was done on 2, 4, 8 weeks. Patients were thoroughly interviewed and physically examined in the presence of female attendant to determine the underlying cause of backache. Patients found with problem other than orthopedics were guided to the required specialist or department and patients found with any underlying pathology were referred for necessary treatment. Routine investigations like ESR, X-ray spine and any other necessary investigations including any ordered by the gynecologist were done to arrive at the diagnosis.

Consent type- Written informed consent

Ethical Consideration- The study was approved by institutional ethics committee.

Statistical Analysis- Data was analyzed using SPSS version 16 (Trial Version). Data were expressed in terms of percentage. Chi-Square test was used to find the association. P value less than 0.05 was considered statistically significant.

RESULTS-

Table 1- Demographic detail and Pelvic Inflammatory Disease status of the study participants.

Parameters		Number (%)
Age	18-30 years	45 (22.5)
	30-40 years	55 (27.5)
	>40 years	100 (50)
Education	Educated	170 (85)
	Non-Educated	30 (15)
Obesity status	Obese	110 (55)
	Non-Obese	90 (45)
Socio-economic status	High	40 (20)
	Middle	130 (65)
	Low	30 (15)
PID	Yes	128 (64)
	No	72 (36)

Table 1 shows demographic details of the females. Out of 200 females, around 50% belonged to the age group of >40 years which shows that lower backache is common as the age increases in the present study. Most of the females were educated (85%). Around 55% of females were Obese. This could be the significant reason for lower backache. 65% of women belonged to middle class age group. 64% of females who had lower backache had provisional PID. Which were further categorised to Group 1.

Table 2- Treatment and Outcome Association with PID

Treatment	Group 1 (PID)	Group 2 (No PID)	p-value
Antibiotics	128	72	0.001*
Surgery	0	0	-
Surgery with Antibiotics	5	2	0.11
Outcome			
Recovered	126	72	0.02*
Not recovered	2	0	0.21
Mortality	0	0	

In table 2 shows the treatment plan of females which shows the most common treatment was by far antibiotics which shows a significant association in both the groups. As compared surgery was least done in these patients. females with PID (group 1) shows a significant association with treatment plan. As seen outcome nearly all the patient recovered which was significant($p<0.05$). Just 2 patients were not recovered so were sent to follow up. No mortality is seen.

Table 3- Treatment plan for Non-PID patients with lower backache

Treatment plan*	Number (%)
NSAIDS	72 (100)
Physiotherapy	60 (83)
Surgery for backache	2 (4)
Calcium Supplementation	72 (100)

In table 3 the female's patients with NO PID and have only backache were referred to department of Orthopaedics for further evaluation. Nearly all the females were given NSAIDs and Calcium supplementation (100%). While physiotherapy was suggested to 83% of patients and only 4% went to surgery (spinectomy).

Table 4- Association of PID with duration of discharge in different age groups

Age groups		<3 months	6-9 months	<12 months	p-value
Group 1	18-30 years	30	40	22	0.001*
	30-40 years	48	40	26	0.32
	>40 years	50	48	80	0.01*
Group 2	18-30 years	15	5	23	0.34
	30-40 years	7	15	29	0.09
	>40 years	50	52	20	0.10

As per table 4 the duration of discharge in terms of age groups of group 1 and 2 shows a significant association with females with PID and backache in age groups 18-30 years and >40 years. ($p<0.05$) which concludes that duration of discharge is important factor in PID. While group 2 didn't show any kind of association. They were considered for any kind of discharge devoid of PID, but no association was found.

DISCUSSION-

In our study we observed that low backache incidence increased with age which comprised 22.4% of 18-30 years age group, 27.5% of 30-40 years age group and 50% of >40 years age group. This is agreement with the study conducted by Leino P et al which stated that low backache symptoms were more prevalent in females and prevalence of low backache increases with age.[7] Hurwitz et al, stated in his study that age 25-64 years and uneducated and unemployed population are often at higher risk having disabling back conditions.[8] Sachdeva et al stated in their studies that obesity is also a contributing factor or obesity increases the risk of back pain.[9] Cypress BK et al studied the characteristics of physician visits for back pain symptoms.[10] The treatment plan of females which shows the most common treatment was by far antibiotics which shows a significant association in both the groups. As compared surgery was least done in these patients. Females with backache and PID (group 1) shows a significant association with treatment plan. The duration of discharge in terms of age groups of group 1 and 2 shows a significant association with females with PID and backache in age groups 18-30 years and >40 years. ($p<0.05$) which concludes that duration of discharge is important factor in PID. While group 2 didn't show any kind of association. They were considered for any kind of discharge devoid of PID but no association was found. Martin V et al in their study examined that certain back disorders occur more frequently in oral contraceptive pills users.[11]

CONCLUSION-

Pelvic inflammatory disease is a major risk factor causing the low backache in patients and hampering their day to day activities. Female patients with bestowing complaint of back pain along with related complaint of PID should be got investigated for underlying gynaecological pathology and should be treated.

Source of Funding- None
Conflict of Interest- None declared

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