CORRELATION OF FEMALE PARITY TO COMMON PERIANAL CONDITIONS

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ABSTRACT

Objective: The objective of this study was to demonstrate a positive correlation between female parity and the occurrence of four common perianal conditions.

Material and Methods: We conducted a descriptive study, by interviewing female patients coming to the Surgical Out Patient Department or the Casualty Department complaining of any of the four perianal conditions (perianal fistulae, perianal abscesses, hemorrhoids, and anal fissures). The patients were questioned about parity and past history. Fifty patients were examined and investigated.

Results: Out of the total 50 patients there were 16 patients of hemorrhoids, 24 patients of anal fissure, 6 patients of perianal fistula, 3 patients of perianal abscess and 1 patient of 1st degree piles and fissure. In all except the patients of perianal abscess, the predominant parity groups were those of multiparas and grandmultiparas, and predominant age groups were those in their late twenties to forties, the peak reproductive years.

Conclusion: In the cases of hemorrhoids, anal fissures and, to a great extent, perianal fistulae, a positive correlation between parity and perianal disease is easily discernible. The disease are more prevalent in patients in their reproductive year (twenties to forties), which is in keeping with this assessment. However, results may warrant a more specific study, with a larger sampling of patients.

Keywords: Perianal fistulae, perianal abscesses, hemorrhoids, anal fissures, Parity

INTRODUCTION

The rigors of pregnancy put the female body under stresses and strains it normally does not experience, requiring specialized care. Certain conditions are more common in this population than others. These include perianal conditions, which are seen frequently in both surgical and gynecological units.[1, 2]

The incidence of most of these conditions is thought to be due to the pressure of the head of the fetus, which causes ischemia in the pelvic structures, hence increasing the incidence of perianal conditions in females.[3, 4, 5] If this statement is to hold true, then a positive relation between parity and perianal conditions should be discernible. It was to test this hypothesis that this study was conducted.

MATERIAL AND METHODS

This observational study was conducted in the surgical unit of the Hayatabad Medial Complex. Female patients complaining of perianal conditions who came to the surgical out patient department or the casualty department were selected for the purposes of this study. Fifty patients in all were questioned and a form made for this study was filled.

Four common perianal conditions were studied: hemorrhoids, anal fissures, fistula in ano and perianal abscess. In the end the incidence of these conditions and the distribution of the patients by age and parity were analyzed.

RESULTS

Out of the total 50 patients there were 16 patients of hemorrhoids, 24 patients of anal fissure, 6 patients of perianal fistula, 3 patients of perianal abscess and 1 patient of 1st degree piles and fissure. (Figure 1)

There were 3 patients below twenty years of age (15 to 19 years), 15 in their third

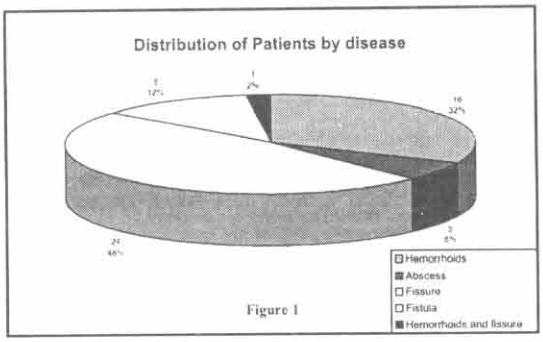
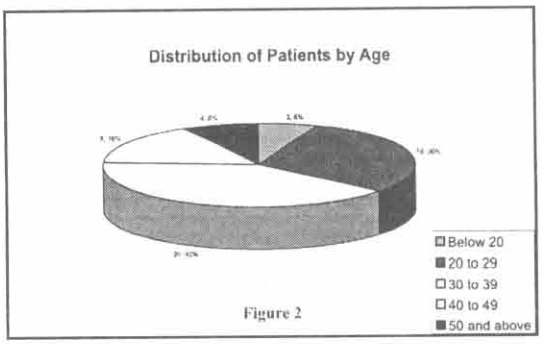


Figure 1



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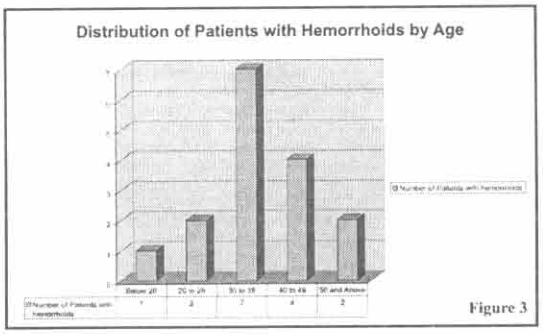

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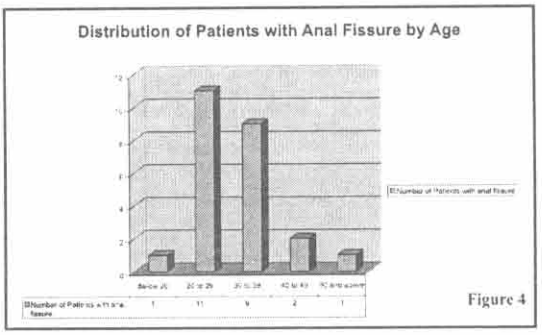
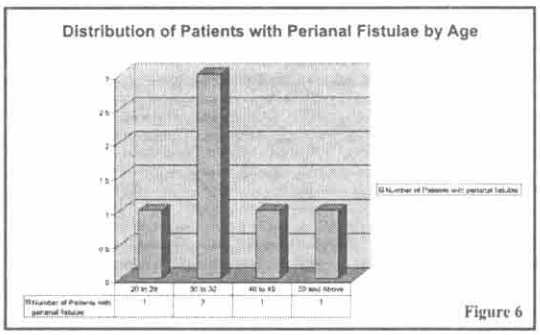


Figure 4

decade (20 to 29 years), 20 patients in their fourth decade (30 to 39 years), 8 in their fifth decade (40 to 49 years), and 4 patients above 50 years. Youngest female was a 15 years old girl who had anal fissure and oldest was of 60 years (Figure 2). Among 16 patients of hemorrhoids, 1 patient was below 20 years, two between 20 to 29 years, seven were in their thirties, 4 in their forties, and 2 were above 50 (Figure 3). Out of 24 patients of anal fissure, 1 was below 20 years of age, 11 were in their twenties, 9 were in their thirties, 2 were in their forties, and one was above 50 (Figure 4). Among the three patients of perianal abscess, 2 were in their second decade, and one was in her thirties (Figure 5). There were six patients of perianal fistula, of which 3 were in their thirties, and one each in the second, fourth and fifth decade (Figure 6). There was one primigravida, 7 nullipara, 1 primipara, 18 multipara (2, 3 or 4 children), and 23 grandmultipara (5 or more). Of the grandmultiparous group, 11 had five children, 5 had six children, 6 had seven children, and 1 had eight children (Figures 7). Among the 16 patients of hemorrhoids, one was nulliparous, one was in her first pregnancy, two were multiparous, and 12 were grandmultiparous . Among the 24 anal fissure patients, 2 were nulliparous, one was primiparous, 15 were multiparous and six were grandmultiparous . Two unmarried nulliparas presented with perianal abscess and one was multiparous . Among the 6 perianal fistula patients, only two were nulliparous. The rest were grandmultiparas . The patient who had hemorrhoids and anal fissure was a 40 year old grandmultipara, with five children. Ten patients gave a history of chronic constipation, one of tuberculosis, one of diabetes mellitus, and one of previous perianal ailments. Thirty-seven had no previous history of any disease (Figure 8).Twenty patients had a posterior fissure, 2 had anterior fissure, and 2 had both anterior and posterior fissures. 4 out of 24 had anterior fissures (approximately 17%) (Figure 9).

DISCUSSION

Maternal injuries, particularly their avoidance, recognition and their management, comprise a fascinating series of acute obstetrical events. Moreover, while maternal mortality has diminished over the last few decades,



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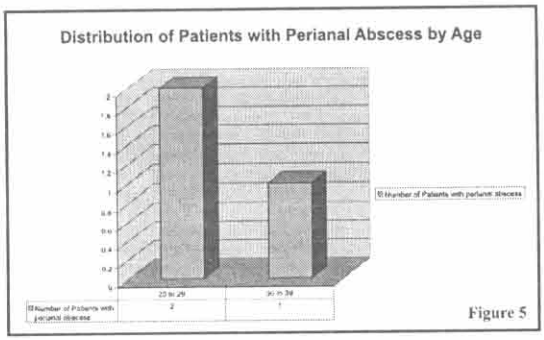

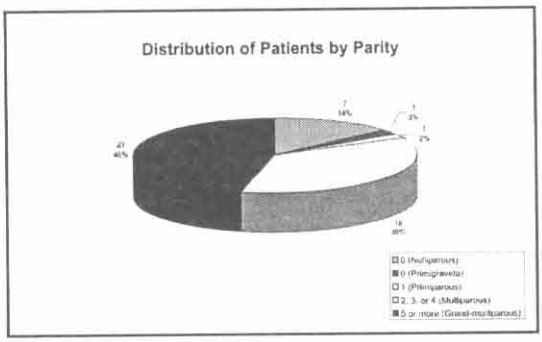

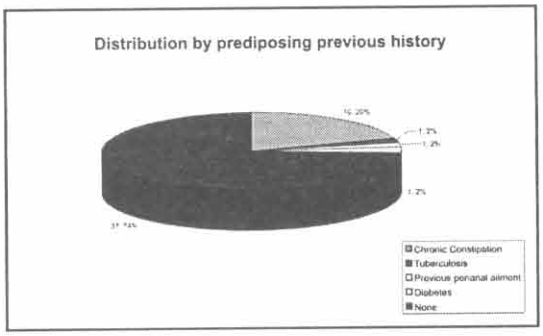

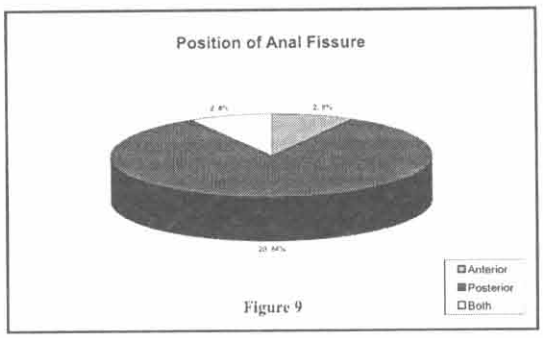

maternal injuries have become increasingly important. Now they contribute significantly towards maternal morbidity. The genital tract, from perineum to peritoneum, resembles a tube. Injuries at each level of the tube may be considered to have a reason within its lumen or outside its wall.[6,7]

Hemorrhoids, anal fissure, perianal abscess and fistula are the four commonest perianal conditions which a general surgeon or a gynecologist deals with.[8,9] Our study analyses the relation of female parity with these conditions.

Hemorrhoids are a common proctological condition. Hemorrhoids have been attributed to low fiber refined diets, inherited predisposition, fecal retention and laxatives abuse.[10,11] Men seem to suffer more than women.[4,9] An increasing prevalence with age is seen, making it a disease of the elderly, but no means limited to old age.[12,13] It may coexist with hernias, genital prolapse and prostatism, which are likely to be linked to the abdominal straining.[14] Raised intra abdominal pressures due to pregnancy, ascites, pelvic tumor or portal hypertension have been postulated as predisposing factors.[14,15] Symptoms include pain, anal swelling, bleeding, itching and disordered anorectal function, even incontinence.[10,14] Repeated profuse anal bleeding occurs, described as 'splash in the pan. This may lead to significant iron deficiency anemia.[10,14,16]

Hemorrhoids can develop for the first time during pregnancy or become exacerbated by the presence of a gravid uterus. Some believe this is due to increased constipation and increased venous compression in the pelvis.[10,15,16]

Anal fissure is a common painful condition affecting the anal canal. The majority of acute fissures heal spontaneously.[16,17] However, some of these acute fissures do not resolve and become chronic. Anterior anal fissure occur most commonly in women (according to Goligher, 1% in males, 10% in females).[16,17,18] Child birth is thought to be a factor. One explanation given is the weakening of the perineal body and pelvic floor due to the fetal head. Ischemia due to pressure exerted by fetal head is also cited as a factor.[17] Once anal fissure develops there is usually spasm of the internal anal sphincter. This retards healing, and all treatment modalities are directed towards relieving the pressure.[11]

Anal fissure also occur in association with Crohn's disease, tuberculosis, sexually transmitted diseases or previous anal operation.[7]

Acute anorectal sepsis is a common condition that usually presents as a painful lump close to the anal margins. It may be associated with generalized disease such as diabetes, AIDS,

tuberculosis, Crohn's disease, and rectal neoplasias.[19,20]

Fistula in ano is a tract, lined by granulating tissue, between anorectal mucosa and the skin around the anus.[21,22,23] It may arise from perianal abscess, perineal injury, Crohn's disease, ulcerative colitis, tuberculosis, actinomycosis, sexually transmitted disease and malignancy.[24,25,26,27]

CONCLUSION

Of the four diseases studied, anal fissure was the most common, followed by hemorrhoids.

In the case of hemorrhoids, perianal fistulae, and anal fissure, the patients were predominantly multipara and grandmultipara, and were largely in their third and fourth decades of life (which are the peak reproductive years). This is in keeping with hypothesis that there is a positive correlation between female parity and perianal disease.

However, this was not so in patients of perianal abscess in this study. Whether this is indeed due to a valid opposing trend or due to a very small sample size (there were only three patients), is a question which would have to be answered by another, more specific study.

On a different note, the results of our study are in accordance with the results and opinions of other recent authors on the occurrence of anterior anal fissures in females. Seventeen percent of the patients were reported to have anterior fissures, much in excess of the 1% occurrence which is said to be the case in males.[28,29,30]

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