

Clinical profile of congenital inguinal hernia at tertiary care hospital in Marathwada region of Maharashtra

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Abstract

Introduction: There is high morbidity and mortality related to inguinal hernia in the developing countries as a considerable percentage of it is not repaired. There is a paucity of published data on the clinicoepidemiological profile of patients presenting with inguinal hernia from India. Present study describes the clinical profile of congenital inguinal hernia cases presenting at the surgery department of our tertiary care hospital in Marathwada region of Maharashtra.

Methods: This descriptive study included 99 patients with congenital inguinal hernia managed by herniotomy at Government Medical College Aurangabad during the period of two years from July 2014 to July 2016. Patients in the age group 0-10 years who attended surgery OPD at Government Medical College and Hospital Aurangabad and diagnosed clinically as congenital inguinal hernia were included in the study. Details like Age and Sex distribution of patients, period of gestation, Side distribution were recorded. Signs like reducibility and association of pain with hernia were mentioned. **Results and Conclusion:** In our study maximum numbers of cases (52) have occurred in 3 to 6 years age group. The study comprised of 89 males and 10 females. Male to female ratio was 8.9:1. Twenty four (24) cases were premature deliveries among the 99 cases of congenital inguinal hernia. 61 cases were right sided, 34 cases were left sided whereas 4 cases were bilateral inguinal hernias. Out of 99 cases, 97 were reducible hernias and 19 cases were associated with pain. Present study gives information regarding the clinical profile of congenital inguinal hernia managed by herniotomy at Government Medical College Aurangabad.


Keywords: Congenital Inguinal Hernia, Reducibility, Age and sex distribution.

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INTRODUCTION

Surgeons often encounter Inguinal and scrotal swellings in children. These swellings are frequently congenital in nature and are often asymptomatic. These hernia swellings are related to the testes descent and to the processus vaginalis^{1,2}. Recently, study by Siddharth Rao *et al*³ has highlighted that there is high morbidity and mortality related to inguinal hernia in the developing countries as a considerable percentage of it is not

repaired. They further mentioned that there is a paucity of published data on the clinicoepidemiological profile of patients presenting with inguinal hernia from India. Present study describes the clinical profile of congenital inguinal hernia cases presenting at the surgery department of our tertiary care hospital in Marathwada region of Maharashtra.

MATERIAL AND METHODS

This descriptive study included 99 patients with congenital inguinal hernia managed by herniotomy at Government Medical College and Hospital Aurangabad during the period of two years from July 2014 to July 2016. The protocol of the study was approved by the ethics committee of the institution. Patients in the age group 0-10 years who attended surgery OPD and diagnosed clinically as congenital inguinal hernia were included in the study. Patients presenting with other medical conditions and associated congenital anomalies were excluded from the study. All patients underwent thorough clinical examination after taking detailed

history. All patients were evaluated for systemic disease or precipitating cause. Details like Age and Sex distribution of patients, period of gestation, Side distribution were recorded. Signs like reducibility and association of pain with hernia were mentioned.

RESULTS

Table 1: Age Distribution

Age	Number of Patients
0-2	14
3-4	27
5-6	25
7-8	11
9-10	22
Total	99

Table 2: Period of Gestation

Gestation	Number of Patients
Preterm	24
Term	75
Total	99

Table 3: Sex Distribution

Sex	Number of Patients
Male	89
Female	10
Total	99

Table 4: Side Distribution

Side	Number of Patients
Right	61
Left	34
Bilateral	4
Total	99

Table 5: Reducibility

Reducibility	Number of Patients
Reducible	97
Irreducible	2
Total	99

Table 6: Hernia Associated With Pain

Pain	Number of Patients
Present	19
Absent	80
Total	99

DISCUSSION

In our study maximum numbers of cases (52) have occurred in 3 to 6 years age group. The study comprised of 89 males and 10 females. Male to female ratio was 8.9:1. Twenty four (24) cases were premature deliveries among the 99 cases of congenital inguinal hernia. 61 cases were right sided, 34 cases were left sided whereas 4 cases were bilateral inguinal hernias. Out of 99 cases, 97 were reducible hernias and 19 cases were associated with pain. Ravikumar V *et al*¹ study of 50 patients reported that the commonest age of presentation was between 1-5

years (42%). Also they found that males were about 94% whereas females were only 6%. In their study, 35 cases were term deliveries and 15 cases were preterm deliveries with signs of obstruction. Similar to our study, most of the swellings (48 out of 50) were reducible. Regarding side distribution of hernia in their study, 54% of the hernias were on the right side, 42% on the left side and 4% occurred bilaterally. Rowe *et al*⁶ and Grosfeld *et al*⁴ reported an incidence of 55%-60% of the inguinal hernias on the right side, that of 25% on the left side and that of 15% bilaterally. Recent Indian study by Himanshu A *et al*⁸ in 490 patients reported 65% right sided, 25% left sided and 10% bilateral cases of congenital inguinal hernia. Congenital inguinal hernia is predominantly found in males. Our results of male: female ratio of 8.9:1 are in line with the data of study series of Grosfeld *et al*^{4,5} reporting male to female ratio of 9:1. Another study by Grosfeld JL *et al*⁷ in 62 children had 57 boys and 5 girls with male: female ratio of 11.4:1. To conclude, as per the findings of our hospital based study in a small convenience based sample, maximum numbers of cases (52) have occurred in 3 to 6 years age group. Male to female ratio was 8.9:1. Twenty four (24) cases were premature deliveries among the 99 cases of congenital inguinal hernia. 61 cases were right sided indicating predominance of right side being affected which is in line with reports in literature.

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