



Surgery

A STUDY ON GROIN HERNIAS PRESENTING AS EMERGENCY

Dr. W. Premalatha Sharon Rose

MS, DMRT Associate Professor Department of General Surgery Thanjavur Medical College Hospital Thanjavur – 613004

KEYWORDS :

AIMS OF STUDY

- 1) To study about various acute surgical emergencies in groin hernia.
- 2) To study various symptoms of presentation
- 3) To study complications
- 4) To study age and sex incidence
- 5) To study types of hernia that present as acute emergency
- 6) To study site of constriction ring
- 7) To study the side affected most
- 8) To study content of hernial sac
- 9) To study duration of hernia to complication
- 10) To study the type of surgery done

MATERIALS AND METHODS

This study was a prospective study done at Thanjavur Medical College Hospital from November 2017 to November 2018. The study group was managed by the Department of General Surgery. Patients are of age group of 20-88 yrs. Duration of complaints range from 2 hrs to 10 days.

87 cases were studied in total.

Those patients presenting with groin hernias as emergency were studied from time of admission till discharge and followed up after discharge with periodic review.

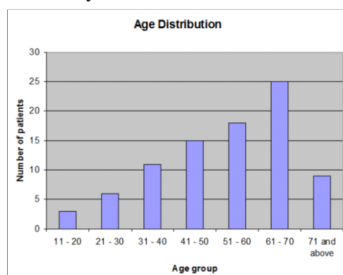
OBSERVATION AND ANALYSIS

Eighty seven patients were studied. Mean age of the patients was 53.25 years

AGE GROUP:

Age group	Frequency	Percentage
11 - 20	3	3.4
21 - 30	6	6.9
31 - 40	11	12.6
41 - 50	15	17.2
51 - 60	18	20.7
61 - 70	25	28.7
71 and above	9	10.3
Total	87	100.0

In various studies done the mean age group involved in complicated groin hernia is 60 - 70 years. In my study complicated hernia is widely distributed in age groups from 30- 70 years with maximum incidence in age group of 60 – 70 years.



SEX DISTRIBUTION:

Sex	Frequency	Percentage
Female	3	3.4
Male	84	96.6

In our study majority of the cases were males, with male to female ratio of 28:1. This shows increased incidence of complicated hernia among men

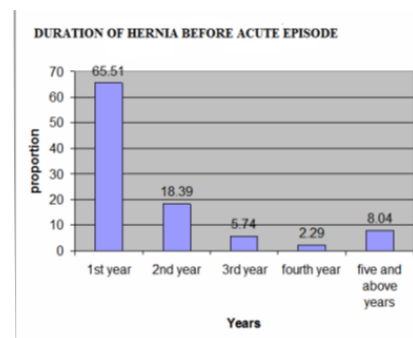
TYPES OF HERNIA WITH SEX

In my study complicated femoral hernia was found to be more common among women, and complicated inguinal hernia was more common in men.

Sex	Inguinal	Femoral
Female	1	2
Male	84	0
Total	85	2

DURATION OF HERNIA BEFORE ACUTE EPISODE

Duration	Frequency	Percentage
1st year	57	65.5
2nd year	16	18.4
3rd year	5	5.7
4th year	2	2.3
5 and more years	7	8.0
Total	87	100.0



Side of hernia most commonly complicated

Side	Frequency	Percentage
Right	67	77.01
Left	20	22.99
Total	87	100

In my study right sided hernia was found to be more common than left sided hernia with right to Left ratio of 3.35: 1

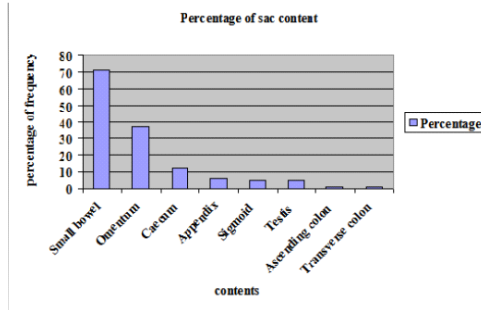
SYMPTOMS

Symptoms	Frequency	Percentage
Pain with groin swelling	86	98.9
Vomiting	50	57.5
Irreducibility	21	24.1
Abdominal distension	16	18.4
Obstipation	11	12.6
Nausea	5	5.7
Fever	2	2.3
Faeculent vomiting	1	1.1

In my study the most common symptom was groin swelling with pain followed by vomiting.

CONTENTS OF THE HERNIAL SAC

Content	Frequency	Percentage
Small bowel	62	71.3
Omentum	32	36.8
Caecum	10	12.5
Appendix	5	5.7
Sigmoid	4	4.6
Testis	4	4.6
Ascending colon	1	1.1
Transverse colon	1	1.1



Site of obstruction

Site of obstruction	Frequency	Percentage
Deep ring	48	55.2
Superficial ring	37	42.5
Femoral ring	2	2.3

In standard studies most common site of obstruction is the deep ring. In our study also the most common site of obstruction was the deep ring.

OPTIMUM PROCEDURE DONE

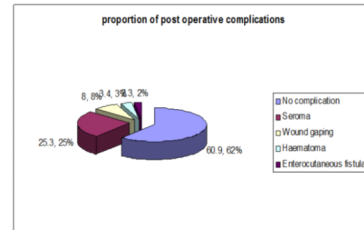
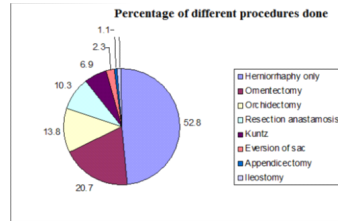
Procedure done	Frequency	Percentage
Herniorrhaphy only	46	52.8
Omentectomy	18	20.7
Orchidectomy	12	13.8
Bowel resection and anastomosis	9	10.3
Kuntz procedure	6	6.9
Herniotomy with anatomical repair	2	2.3
Appendicectomy	1	1.1
Ileosotomy	1	1.1

In my study all patients underwent Maloney's darn repair. Darn repair was done with 1- Prolene with three layers darn. The most common procedure done was Herniorrhaphy alone among 52.8% of the patients, followed by omentectomy in 20.7% of the patients. Resection anastomosis was done in 10.3% of the patients. Kuntz repair was done for aged and recurrent hernia patients.

POST OPERATIVE COMPLICATION

Post operative complication	Frequency	Percentage
No complication	53	60.9
Seroma	22	25.3
Wound gaping	7	8
Haematoma	3	3.4
Enterocutaneous fistula	2	2.3

All the patients were given preoperative antibiotic, ampicillin 1 gm IV at the beginning of the procedure and continued for four days post operatively. Most of the patients recovered without any complication (60.9%). Most common complication was found to be seroma (25.3%) which was managed conservatively. There were three cases of hematoma of which two needed evacuation on the third post operative day. There were seven cases of wound gaping, for which culture and sensitivity was done and appropriate antibiotics were given. All underwent secondary suturing after the infection was controlled. Two cases had enterocutaneous fistula, of which one patient died post operatively on fourth day due to systemic inflammatory response syndrome (SIRS), and the other patients were managed conservatively with spontaneous closure of the fistula.

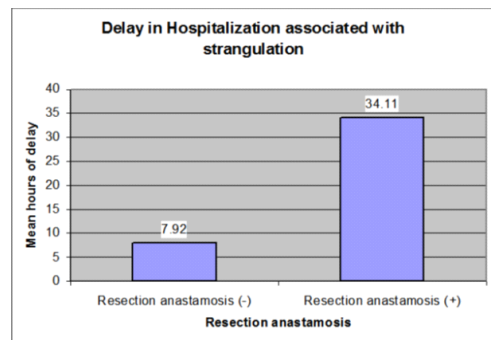


DELAY IN HOSPITALIZATION

Mean hours of delay in hospitalization among those who underwent resection anastomosis was 34.07 hours compared to 7.55 hours of delay among those who did not undergo resection anastomosis. This difference was found to be statistically significant with p<0.001

Delay in hospitalization	Frequency	Percentage
0-6	37	42.5
7-12	33	37.9
13-24	10	11.5
25-36	4	4.6
37-48	2	2.3
49-60	1	1.1
Total	87	100.0

Mean hours of delay in hospitalization among those who underwent resection anastomosis was 34.07 hours compared to 7.55 hours of delay among those who did not undergo resection anastomosis. This difference was found to be statistically significant with p<0.001



CONCLUSION

The following observation was made in this study

- 1) Incidence of acute complication of groin hernia was found to be highest in age group of 60yrs to 70yrs.
- 2) Complication of inguinal hernia was more common in males than females and complication of femoral hernia was more common in females than males
- 3) The incidence of acute complication of groin hernia is three times commoner on the right side than on the left side.
- 4) The average duration of hernia before acute episode was 19.45 months. Majority of acute presentation was within first year of developing hernia and more than 80% of them presented within first two years.
- 5) The most common symptom was groin swelling with pain followed by vomiting
- 6) The most common content found in the sac was small bowel followed by omentum
- 7) The deep ring was found to be the most common site of obstruction
- 8) The most common procedure followed in my study was only herniorrhaphy. It was followed by omentectomy.
- 9) Majority of the patients post operative period was uneventful. The

most common complication encountered was seroma.

- 10) The patients with older age group were found to have strangulation more commonly than younger age group. The percentage of strangulation progressively increased from 50 years and above.
- 11) The average delay in hospitalization was 10.37 hours of which those who had strangulation had an average of 34.07 hours and those without strangulation was 7.55 hours. This was found statistically significant as the time duration increased so also the chances of strangulation.