

MANAGEMENT OF PATIENTS WITH INGUINAL HERNIA

Pages with reference to book, From 29 To 31

Amir Qureshi (Surgical Unit, 1, Dow Medical College and Civil Hospital, Karachi.)

Hilaria Desa (Present Address: Dept. of Community Medicine, Aga Khan University of Health Sciences, Karachi.)

Abstract

Management of 100 patients with inguinal hernia is presented. Lack of an effective filter clinic resulted in admission of patients above the handling capacity of the unit, some of whom were unfit for surgery. As a result preoperative stay was unduly prolonged (mean:5.5 days; range: 1-37 days). Consultants performed 3%, Senior registrars 6.3%, House surgeons 18% and Junior registrars 73% of operations. There was considerable variation in the operative techniques and anaesthesia employed. The efficacy of repair could not be monitored as there was no organised system of follow up. The mean post operative stay was 7.5 days (range: 1-32 days), patients being kept in hospital until sutures were removed. Shorter stays cannot be enforced until expanded health care system is introduced. (JPMA36- 29, 1986).

INTRODUCTION

Inguinal hernia, a common surgical problem, accounted for 18% of the 560 routine admissions to Surgical Unit I of the Civil Hospital, Karachi during 1983. This paper reviews the management of the patients with inguinal hernia.

MATERIAL AND METHODS

A retrospective analysis of case records of the 100 patients hospitalised with inguinal hernia in Surgical Unit I of Civil Hospital, Karachi during the year 1983 was done. All but four patients underwent surgery.

Admissions policy, length of pre-operative stay, skill of the surgeon, technique of repair, type of anaesthesia used, and post-operative complications were among the parameters considered in the analysis.

RESULTS

Of the 100 patients seen in this series, 83 were admitted through the Out through the Casualty Department. Information regarding referrals by clinics in either of these groups.

The maximum number of cases, routine as well as emergency, were seen between May and August. The ages ranged from 3 to 82 years, 15% of the patients being over 60 years of age. There were no females in this series.

The mean duration between the appearance of the swelling and reporting was 4 years and 4 months (range: 1 day- 35 years); in the case of bilateral hernias (12 cases) the corresponding interval was 5 years and 2 months (range: 2 months-14 years).

Thirty percent of the non obstructed cases complained of pain, which was of less than 6 months duration in 67% of cases.

The mean duration of hospital stay was 13 days. Pre-operative stay averaged 5.5 days (range: 1-37 days) while post operative stay averaged 7.5 days (range: 1-32 days). The majority of the patients were operated on the third day after admission. The reasons for prolonged preoperative stay are given in

Table I.

Table I.
Reason For Prolonged Hospital Stay.

Cases not scheduled for first available day of surgery	
Reasons for Prolonged Stay	No. of Cases
Chest infection	2
Hypertension	3
Ischaemic Heart Disease (IHD)	3
Delayed Investigations	1
No definite reason	18
Lack of operating time (i.e. long list)	9
Failure of spinal anaesthesia	1
Total	37

Of 96 operations, 70 (73%) were performed by Junior Registrars, 17 (18%) by House Surgeons, 6 (6.3%) by Senior Registrars, and only three (3.1%) by the Consultants.

Anaesthesia employed is shown in Table II;

Table II
Anaesthesia Employed.

Type of anaesthesia	No. of cases
General	13
Spinal	73
Local	7
Not specified	3
Total	96

Majority of the patients were operated under spinal anaesthesia.

Of the 14 emergency procedures, evidence of bowel strangulation was found in seven cases. However in only one case was ileal resection performed. Simultaneous bilateral repair was done in two cases. Two orchidectomies were done, the indication in one case being injury to the vas deferens. A Bassini repair was employed for the posterior inguinal wall in 65 cases. In two cases the upper leaf of the external oblique was sutured behind the coril. The posterior inguinal wall was repaired in 52 cases with non absorbable material (silk or nylon) while catgut was employed in 44 cases. Hernioplasty with synthetic woven polyester mesh was carried out in one case in which the hernia had recurred twice. Post-operative complications are shown in Table III.

Table III
Post Operative Complications.

Complications	No. of Cases
Chest infection	12
Scrotal oedema	7
Wound infection	3
Wound haematoma	1
Scrotal oedema + Wound infection	1
Scrotal oedema + Wound haematoma	1
Total	25

There was one post-operative death. The cause of sudden death in this case is not known. No information was available concerning the number of patients who developed urinary retention requiring catheterisation. No data pertaining to long term follow up was available.

DISCUSSION

The present series confirms the lack of a link between the general physician and the hospital, with regard to patient referral. The motivating factor for seeking admission was in most patients pain rather than the presence of a swelling alone. It is difficult to interpret the fact that emergency admissions showed the same seasonal pattern as did routine cases.

A common reason for prolonged preoperative stay was the detection, on admission, of associated disorders that contraindicated immediate surgery. A complete patient profile and basic investigations obtained at a filter clinic could help to eliminate this factor. Other common reasons were:

- i. the patient being passed over in favour of another while preparing the operation list, and
- ii. postponement of scheduled surgery as a result of lack of operating time (the list was too long). A waiting list system could prevent admissions beyond the handling capacity of the unit.

It is established that the skill of the operating surgeon has a direct bearing on hernia recurrence. In

order to minimise recurrence it has been recommended that only senior registrars and above should be allowed to operate.¹

However in the present set up, the considerable workload on the senior surgeons and staff may have made this an impracticable policy.

There was great diversity in terms of the type of anaesthesia and the operative technique as well as the type of suture material used- for repair

We feel that some sort of standardisation should be achieved in order to improve the efficiency of the operating team. Increasing emphasis is being placed on Out-patient herniorrhaphy” under local anaesthesia.²

Prolonged post-operative stay was the result of a tendency to keep the patient in the ward until the stitches were removed (usually on the 7th or 8th post-operative day). This was necessary because the existing health care system does not permit patient referrals to family physicians, nor is there a concept of domiciliary visits. In one Swedish centre the duration of hospital stay for uncomplicated hernial repair was 5.9 day³.

Hospital beds should be thought of as dynamic rather than static entities especially

where limited beds are available. Many authors^{3,4} have emphasised the importance of “out patient herniorrhaphy” or short stay admission to increase turnover. Such a policy would not only result in considerable economic advantage but would also reduce the incidence of complication (obstruction) and reduce nosocomial infections.²

No data pertaining to follow ups was available for this series. A Follow up is an essential part of management as it provides excellent feed back regarding the efficacy of a given technique.

Recently the Surgical Unit One of Civil Hospital Karachi has adopted a policy where by hernias are being repaired under a fixed technique using local anaesthesia. This is the first, step towards ultimate short stay surgery for hernia patients in the unit.

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