



A PROSPECTIVE STUDY ON MANAGEMENT OF RECURRENT INGUINAL HERNIAS

General Surgery

Dr. K. S. Sudeep Department Of General Surgery, Narayana Medical College And Hospital, Nellore

Dr. Sampath Kumar KI Department Of General Surgery, Narayana Medical College And Hospital, Nellore

Dr. Chaitanya Kumar Reddy P Department Of General Surgery, Narayana Medical College And Hospital, Nellore

Dr. Praneeth Department Of General Surgery, Narayana Medical College And Hospital, Nellore

Dr. Rangaswamy Department Of General Surgery, Narayana Medical College And Hospital, Nellore

ABSTRACT

Aims and Objectives : To review and assess the causes and different approaches for the management of recurrent inguinal hernias and their follow up. **Methods :** The prospective study was carried out by Department of General Surgery, NARAYANA MEDICAL COLLEGE AND HOSPITALS, Nellore, Andhra Pradesh between June 2017 to January 2019. 60 male patients were chosen in the age group 40-60 years with clinical diagnosis recurrent inguinal hernia. **Results :** From the present study, The wound infection and chronic pain is more with inguinal approach but no recurrences seen and has less operative time. Stoppas has a good plane of dissection and it covers the other hernias also but, seroma and recurrence are seen with it. Laparoscopic approach require more skill and good operating unit and it is expensive and learning is long but has excellent results. **Conclusion :** Lichtenstein tension free meshplasty is still the gold standard procedure. Laparoscopic procedure has the more satisfying results.

KEYWORDS

INTRODUCTION

Recurrent hernias are still relatively common in our practice. Despite the introduction of several therapeutic improvements, recurrent hernias still appear in 3-5 %. The reasons for recurrence and its management are discussed in a fundamental way. A failure may depend mainly on the quality of the repair and also the underlying risk factor. Hernia recurrences are usually caused by technical factors, such as excessive tension on the repair, missed hernias, failure to include an adequate musculoaponeurotic margin in the repair, and improper mesh size and placement. Recurrence also can result from failure to close a patulous internal inguinal ring, the size of which is always assessed at the conclusion of the primary surgery. Recurrences are more common in patients with direct hernias and they usually involve the floor of the inguinal canal near the pubic tubercle where the suture line tension is greatest.

Aims and Objectives

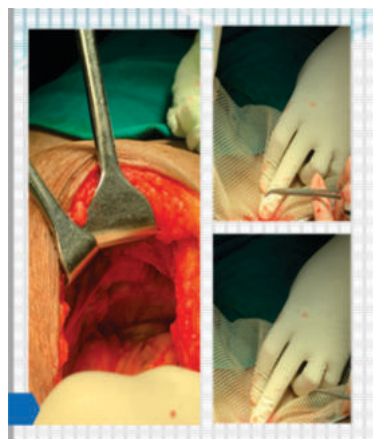
To review and assess the causes and different approaches for the management of recurrent inguinal hernias and their follow up.

Materials and Methods

The prospective study was carried out by Department of General Surgery, NARAYANA MEDICAL COLLEGE AND HOSPITALS, Nellore, Andhra Pradesh between June 2017 to January 2019. 60 male patients were chosen in the age group 40-60 years with clinical diagnosis recurrent inguinal hernia whose age, history of previous surgery recorded. All patients were explained about the treatment plan and method of procedure and their consent taken. Follow up visits were performed at 3, 6, 12 months for any recurrence and pain.

Observations

History stands out as witness, that through the ages, hernias have been the 'bugbane' to mankind. Failed hernias continue to torment the patients, humiliates their surgeons mercilessly. 60 patients with recurrent inguinal hernia in which 20 underwent herniorrhaphy and 40 underwent hernioplasty, previously were chosen and planned electively for surgery. While operating by open hernioplasty, in those who had undergone hernioplasty previously, the anatomy was obscured and there is difficult while doing meshplasty, than who have undergone herniorrhaphy. During the open hernioplasty for recurrent cases, most of the cases seen with mesh migration (78%), followed by inadequate mesh size. In cases with patulous deep ring, little repair along with meshplasty done. In our study 18 cases were operated by Stoppas, the mean time is 100min and peritoneal breach is most common intra-operative trouble seen in 6 cases. Recurrence is noted in 2 patients at the end of 3 months.



In TEP and TAPP, there is no statistical difference between both when considering the outcome in operation, haematoma, length of stay in hospital and return to usual activity and recurrence. In our study, no recurrences were seen and no intra-operative and post operative complications seen. But the mean operative time is more in TEP>TAPP

RESULTS

60 patients of recurrent inguinal hernia were treated during the study period in NARAYANA Hospital. The previous surgeries for hernia repair were 20 herniorrhaphy [33%] and 40 were hernioplasty [67%]. The predisposing factors for hernia recurrence in the patients were elicited in table-1. The presentation of the recurrent hernia were more on the right side followed by the left side as seen in table-2.

TABLE- 1

SNO	RISK FACTORS	FREQUENCY	PERCENTAGE
1.	Wound infection	12	20%
2.	Over weight (BMI>25)	28	46.6%
3.	Smoking	35	58.3%
4.	Heavy weight lifting	16	26.6%
5.	Prostatism	4	6.67%
6.	Chronic constipation	9	15%

TABLE-2

S.NO	SITE OF HERNIA	FREQUENCY	PERCENTAGE
1.	Right recurrent	26	43.3%
2.	Left recurrent	16	26.6%
3.	Bilateral recurrent	8	13.3%
4.	Bilateral hernia with unilateral recurrence	10	16.6%

35 cases were underwent open hernioplasty with prosthetic mesh [Lichtenstein tension free mesh hernioplasty] and 18 underwent stoppa's through lower midline incision and 4 TAPP and 3 TEP. The mean operability time for each procedure is mentioned in table [3]. Open hernioplasty takes less time than stoppa's than laparoscopic procedure.

TABLE-3

S.NO	OPERATIVE PROCEDURE	TIME
1.	Hernioplasty	60min
2.	Stoppa's (GPRVS)	100min
3.	TAPP	110min
4.	TEP	140min

The early post-operative complications were elicited in table [4]. Seroma being the most common over all, followed by cord and testicular pain.

TABLE-4

S.NO	EARLY POST-OPERATIVE COMPLICATIONS	HERNIOPLASTY [35]	STOPPA [18]	LAPAROSCOPIC [7]
1.	Seroma	7(20%)	3(16.6%)	-
2.	Haematoma	-	-	-
3.	Wound infection	2(5.7%)	-	-
4.	Cord and testicular complications	4(11.4%)	-	-

The early mobilisation of patient and less hospital stay is with Laparoscopy followed by Open followed by stoppa's procedure. The follow up of the patients is done in 3,6,12 month's, with pain being the most common complaint during the each visit, which is more in open hernioplasty than stoppa's than Laparoscopy. There were 2 recurrences with stoppa's at the presentation of 3 month both on left side and no recurrences with open hernioplasty and laparoscopy. The follow up elicits in table-[5].

TABLE-5

S.NO.	PROCEDURE	COMPLAINTS	3 MONTHS	6 MONTHS	12 MONTHS
1.	HERNIOPLASTY [35]	Recurrence	-	-	-
		Pain	6(17.14%)	3(8.57%)	3(8.57%)
2.	STOPPAS [18] [GPRVS]	Recurrence	2(11.11%)	-	-
		Pain	2(11.11%)	-	-
3.	TAP and TAPP [7]	Recurrence	-	-	-
		Pain	-	-	-

CONCLUSION

From the present study, The wound infection and chronic pain is more with inguinal approach but no recurrences seen and has less operative time, but more obscure anatomy is seen. Stoppas took more time and requires good skill. It has good plane of dissection and it covers the other hernias also but, seroma and recurrence are seen with

it. Laparoscopic approach require more skill and good operating unit and it is expensive and learning is long but has excellent results. Lichtenstein tension free meshplasty is still the gold standard procedure. Laparoscopic procedure has the more satisfying results.

REFERENCES

- Gould J. Laparoscopic versus open inguinal hernia repair. Surg Clin N AM. 2008;88:1073-1081.
- Mizrahi H, Parker MC. Management of asymptomatic inguinal hernia: a systematic review of the evidence. Arch Surg. 2012;147:277-281.
- Nilsson H, Stylianidis G, Haapamaki M, et al. Mortality after groin hernia surgery. Ann Surg. 2007;245:656-660.
- Stoppa RE, Rives JL, Warlaumont CR. The use of dacron in the repair of hernias of the groin. Surg Clin North AM. 1984;64:269
- Spaw AT, Ennis BW, Spaw LP. Laparoscopic hernia repair: the anatomy basis. J Laparoendosc Surg. 1991;1:269