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Original article:

Hernia surgery outcome & complications: Observational study

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Abstract:

Introduction: Complications after inguinal or femoral hernia repair are relatively common. The incidence is higher after emergent repairs and recurrent hernia repairs compared with elective repair. With the transition to tension-free repair, hernia recurrence is less frequent, while other complications, such as post-herniorrhaphy neuralgia, have become more prominent.

Material and methods: The present work was carried out in the Department of General Surgery in YCM hospital, Pimpri, Pune, Maharashtra in last six months. This was retrospective study that collected information from 100 patients either from interview or previous records. All the patients undergoing hernia surgery in last one year were included in study. The patients that did not took regular follow up were excluded from the present study.

Results: In our present study, 95 % were male patients. In our present study, Mean age was 58.33 years with the age range 19 years to 65 years. In our present study postoperative complications were seen in 22 % cases with observed recurrence in 2% cases.

Conclusion: Our results suggest that a general hospital with high patient volume, and good training and audit practices, is able to produce excellent results following inguinal hernia repair. We also found the level of patient satisfaction among those who underwent inguinal hernia repair to be high.

Introduction:

Complications after inguinal or femoral hernia repair are relatively common. The incidence is higher after emergent repairs and recurrent hernia repairs compared with elective repairs. With the transition to tension-free repair, hernia recurrence is less frequent, while other complications, such as post-herniorrhaphy neuralgia, have become more prominent.

Complications that occur in the perioperative period include wound seroma/hematoma, urinary retention, bladder injury, and superficial incisional surgical site infection (SSI), while complications that occur later following hernia repair include persistent groin pain and post-herniorrhaphy neuralgia, testicular complications, deep incisional/mesh infection, recurrent hernia, and mesh migration and erosion. Complications after inguinal or femoral hernia repair are relatively common, with the incidence depending upon the clinical circumstance under which the repair was performed as well as the site and type of the hernia [1].

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Urgent and emergent procedures were associated with higher complication rates compared with elective repairs [2,3]. In one review of 1034 groin hernia repairs, overall complication rates were 27 percent for acute hernia repairs and 15.1 percent for elective repairs [3]. The advantages of new technology though are beneficial [4]

With this view present study was planned to study hernia surgery outcome & complications in our hospital.

Material and methods:

The present work was carried out in the Department of General Surgery in YCM Hospital, Pimpri, Pune, Maharashtra in last six months. This was retrospective study that collected information from 100 patients either from interview or previous records. All the patients undergoing hernia surgery in last one year were included in the study. The patients that did not took regular follow up – were excluded from the present study.

The samples were collected randomly.

We included patients from 20 years upto 65 years in present study. All data was tabulated in Excel sheet and analyzed.

Results:

Table 1) Gender wise patient's distribution

Gender	Number of patients	Percentage
Male	95	95
Female	5	5
Total	100	100

In our present study , 95 % were male patients.

Table 2) Age wise patient's distribution

Age (Years)	Number of patients	Percentage
< 20	1	1
20 -40	8	8
40 - 60	52	52
.60	39	39

In our present Mean age was 58.33 years with age range 19 years to 65 years.

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Table 3) Outcomes of patients who underwent inguinal hernia repair

Outcome of surgery	Number of patients	Percentage
Recurrence	2	2
Reoperation for recurrence	19	19
Postoperative complications	22	22

Table 4) Postoperative complications of patients who underwent inguinal hernia repair

Postoperative complications	Number of patients	Percentage
Hypoesthesia / hematoma	5	5
Urinary retention	3	3
Chronic pain	3	3
Wound infection	2	2
Wound dehiscence	2	2
Intraoperative visceral injury	1	1
Others	6	6

In our present study postoperative complications were seen in 22 % cases with recurrence observed in 2% cases.

Discussion:

In our present study, 95 % were male patients. In our present study, Mean age was 58.33 years with age range 19 years to 65 years. In our present study postoperative complications were seen in 22 % cases with recurrence was observed in 2% cases. Our results suggest that a general hospital with high patient volume, and good training and audit practices, is able to produce excellent results following inguinal hernia repair. We also found the level of patient satisfaction among those who underwent inguinal hernia repair to be high.

For postoperative complications following hernia repair, the rates for chronic pain and numbness were included, although these two variables are not commonly reported in Asian institutions, where cultural influences may result in an under-reporting of pain and numbness.(5)

In our study, hypoaesthesia or numbness was the most common postoperative complication following hernia repair. Despite this, a majority of our patients were satisfied with the surgery and would recommend the procedure to their families and friends, indicating that hypoaesthesia was not considered a major problem.

A key limitation of our study was the retrospective nature of the audit. While we could establish associations between certain factors, we were unable to comment on the causal relationships between them. The relatively low response rates obtained for the telephone interviews in our study may also have led to an underestimation of complications, such as chronic pain and hypoaesthesia, in our cohort.

In Cuihong Jin work, seven factors were associated with overall complications, namely age >65 years, duration of incarceration ≥8 h, ASA grade ≥III, cardiopathy, bronchial asthma, indirect inguinal hernia, and strangulation. The factor reported as the sole factor affecting morbidity. It is easy to explain their role in the general complications, for all of these factors reflect the status of the patient as a whole. Usually, incarcerated hernias require more frequent

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bowel resections, but in our work, there were only two cases which underwent bowel resections, and none of them suffered from postoperative complications. [6]

Incarcerated inguinal hernia manifests as an acutely irreducible inguinal mass, which requires timely surgery because it may eventuate in the strangulation and gangrene of the intestine; it represents between 5 and 15% of groin hernial repairs [7]

Conclusion:

Our results suggest that a general hospital with high patient volume, and good training and audit practices, is able to produce excellent results following inguinal hernia repair. We also found the level of patient satisfaction among those who underwent inguinal hernia repair to be high.

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