CLINICAL STUDY OF VENTRAL HERNIA AND ITS MANAGEMENT IN BOWRING AND LADY CURZON HOSPITAL, BMC AND RI, BENGALURU

Harindranath H. R¹, Balaji H², Mohan Kumar R³

¹Associate Professor, Department of General Surgery, Bangalore Medical College and Research Institute, Bangalore. ²Post Graduate, Department of General Surgery, Bangalore Medical College and Research Institute, Bangalore. ³Post Graduate, Department of General Surgery, Bangalore Medical College and Research Institute, Bangalore.

ABSTRACT

Hernia is a common word that most surgeons are familiar with, a prospective study was planned to analyse the spectrum of Ventral Hernia in a BMC and RI, Bengaluru.

KEYWORDS

Hernia, Complicated Hernia, Obstruction, Strangulation, Mesh Repair, Anatomical Repair.

HOW TO CITE THIS ARTICLE: Harindranath H. R, Balaji H, Mohan Kumar R. "Clinical study of ventral hernia and its management in Bowring and Lady Curzon Hospital, BMC and RI, Bengaluru." Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 103, December 24; Page: 16855-16856, DOI: 10.14260/jemds/2015/2534

INTRODUCTION

Hernia is derived from a Latin word meaning "a rupture." Ventral hernias are second most common type of hernia after groin hernia.⁽¹⁾ accounting for 21%-30% of all varieties of hernias. In the view of this large numbers, we need to study ventral hernias in our setting.

METHODS

The study was conducted in Bowring and Lady Curzon Hospital, BMC and RI, Bengaluru. A total of 100 cases have been studied from October 2011 to October 2013 and patient was followed up for 18 months after surgery, the data was compiled and analysed.

RESULTS

In our clinical study, 200 patient with hernia were admitted and treated between October 2011 to October 2013. Total percentage of groin hernia - 58% Total percentage of ventral hernia - 42%

Among ventral hernia (84 cases),

- 1. No. of incisional hernia 36(43%)
- 2. No. of paraumblical hernia 26(31%)
- 3. No. of umblical hernia 16(19%)
- 4. No. of epigastric hernia 6(7%)
- 1. Age distribution of Ventral Hernia cases 71% seen in 3^{rd} 6^{th} decades.
- 2. Presenting complaints were 52% only with swellings, 38% both swelling and pain, 10% only pain.
- 3. An 81%(68 cases) of ventral hernia were uncomplicated and 19%(16 cases) were complicated, either obstruction or strangulation.
- Predisposing factors h/o Previous Surgery 32%, h/o Smoking 23%, h/o Multiparity 13%. Associated with Obesity 8%, Anaemia 7%, Hypertension 7% and Malnutrition 2%.

Financial or Other, Competing Interest: None. Submission 05-12-2015, Peer Review 07-12-2015, Acceptance 18-12-2015, Published 24-12-2015. Corresponding Author: Dr. Harindranath H. R, No. 1852/3, 1st Cross, Prakash Nagar, Bangalore -560021. E-mail: harindranath82@gmail.com DOI:10.14260/jemds/2015/2534

- 5. A 72%(24 cases) of Incisional hernia had h/o obstetrical and gynaecological surgeries, 29%(12 cases) due to other surgical cause.
- A 63% of patients with Incisional hernia had h/o of surgery within 1 year, 16% in 1-5 years and 21% more than 5 years.
- 7. An 81%(68 cases) with uncomplicated ventral hernia underwent mesh repair, 19%(16 cases) with complicated ventral hernia underwent anatomical repair.
- 8. A 78.6%(33 cases) of Ventral hernia had no complication after surgery, 14.3%(6 cases) had Seroma formation, 7.1%(3 cases) had surgical site infection and no patient had mesh infection.
- 9. All patients are on followup and 3 patients with anatomical repair had recurrence and mesh done.

DISCUSSION

The incidence of Incisional hernias according to Robert J. Baker.⁽²⁾ series was 5% to 13.9% and Hodgson N.C.F et al.⁽³⁾ 9% to 19%. Present study is 43%.

Ventral hernia is more common among female patients, 30 cases reported; this is comparable to Ellis H. et al.⁽⁴⁾ 64.6% and present study is 71%.

Riet M. et al.⁽⁵⁾ 2002 reported 6-15% incarceration and 2% strangulation; this is comparable to present study; 19% had complicated ventral hernia at the time of presentation.

Common predisposing factors are previous surgery, smoking, multiparity, obesity.

Balen et al.⁽⁶⁾ and Toms P.A. et al.⁽⁷⁾ reported Incisional hernias are more common following midline incision due to avascular linea alba (41%). Present study was 45%.

A 71% Incisional hernia is due to gynaecological surgeries.

Jack Abrahamson.⁽⁸⁾ has said that 2/3rd Incisional hernia occurs within 5 years, 1/3rd occurs after 5 years. Present study 79% in 1-5 years, more than 5 years 21%.

No recurrence of hernia is seen in elective mesh repair, 2.3%(1 patient) recurrence following anatomical repair done in emergency.

CONCLUSIONS

Ventral hernia is the second commonest hernia accounting for 42% after groin hernia in general surgery. Among ventral hernias, Incisional hernia were the commonest 43% followed by Para umbilical (31%), Umblical hernia (19%) and Epigastric hernia (7%).

Jemds.com

The commonest age group was 30-60 years, the youngest age group was 20 years and oldest was 75 years.

Previous surgery, postoperative wound infection, laparotomy wound following Hollow viscous perforation, multiparty, smoking, obesity were the commonest risk factors.

Females-to-Male ratio in Incisional hernia is 2.84:1, previous history of gynaecological surgeries constitutes 72% of cases.

Most common mode of presentation is uncomplicated hernia. Recurrence is more common with anatomical repair.

Laparoscopic approach for ventral hernia is definitely method of choice with minimal operative scar, minimal wound infection. Cost of surgery, surgical expertise is limiting factor.

REFERENCES

- 1. Townsend: Sabiston text book 18th edition, "Abdominal hernia," page no. (1114-1115).
- 2. Condon RE. "Ventral abdominal hernia." In: Baker RJ, Fischer JE, editors. Mastery of surgery. 4th edition. Philadelphia: Lippincott Williams & Wilkins; 2001.

- 3. Hodgson NCF et al. 1999. "The search for an ideal method of abdominal closure," Annals of Surgery, Vol. 231, no. 3, p. 436-442.
- Abrahamson Jack. "Maingot's abdominal operations," edited by Zinner Michael J and Schwartz, Seynous, Ellis Harold, 10th edition, Appleton country crofts, 1997;479-580.
- 5. Riet M Van't et al. 2002. "Met-analysis of techniques for closure of midline abdominal incisions." The British Journal of Surgery, vol. 89, p. 1350-1356.
- 6. Balen EM et al. 1998. "Repair of ventral hernias with ePTFE." The British Journal of Surgery, vol. 85, no. 10. P.1415-1418.
- 7. Toms AP et al. 1999. "Illustrated review of new imaging techniques in the diagnosis of abdominal wall hernias." British Journal of Surgery, 86, 1243-1249.
- 8. Carlson MA, Ludwig KA, Condon RE. Ventral hernia and other complications of 1000 midline incision South Med J 1995;88:450.