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Original Research Paper

Surgery

CLINICAL STUDY OF COMPLICATED(OBSTRUCTED) INGUINAL INGUINAL HERNIA

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INTRODUCTION-

Hernia is a protrusion of viscous through an opening in the wall of cavity in which it contained. Obstructed inguinal hernia is a major cause of intestinal obstruction in children, with a higher morbidity reported in developing countries due to delay in accessing care[1]

A loop of small intestine becomes trapped in the hernial sac. Early reduction is important to save the trapped bowel and also the testis on the same side. The testicular vessels can be severely compressed by a tense hernia in infants. Inguinal hernia is most common hernia both male and female. These hernia become complicated when it irreducible, obstructed, and later progress to strangulation when the blood supply of its contents is seriously impaired, rendering gangrene imminent. Acute intestinal obstruction is one of the most common surgical emergency in all age groups. Strangulated hernia occurs when the blood supply to the herniated tissue has been cut off. This strangulated tissue can release toxins and infection into the blood stream, which could lead to sepsis or death. Strangulated hernias are medical emergencies.

Gangrenous bowel usually encountered in groin hernia and bowel obstruction. Reason for complicated hernia is because of illiteracy, poverty and hesitancy of patient to come out with complaints get it operated in an early stage. Early diagnosis and repair is safe. Surgery is must for releasing constriction rings and hernia contents in good status and viability.

AIMS AND OBJECTIVES-

To Analyze the clinical presentations and factors affecting the outcome in management of obstructed inguinal hernia

STUDY DESIGN-

Prospective study in twenty five cases of consecutive cases of obstructed inguinal hernia in newly permitted RVRS medical college and Associated Mahatma Gandhi Hospital Bhilwara from August 2017 to April 2019

METHOD-

All patients is about in age ranging 1 to 90 years of age referred from periphery or directly admitted in surgical out door/emergency in Mahatma Gandhi Hospital Bhilwara with diagnosis of irreducible swelling in inguinal region with pain and sign of intestinal obstruction and factor for delayed presentation preoperative and post operative complication were recorded

Clinical presentations and Observations-

Study of twenty five cases all were of low socioeconomic group of all age groups of both sexes were operated emergency operation theatre. All operated under spinal anesthesia except one child aged 2 year under general anesthesia with oxygen by mask.

Age group	Number of cases	percentage
0-20 year	6	24
20-40 year	5	20
40-60 year	4	16
60-80 year	8	32
80-100 year	2	8

Sign and symptoms

Sign and symptom	Number of patients	percentage
swelling	25	100
pain	25	100
vomiting	23	92
Abdominal distention	22	88
constipation	10	40
Negative Cough impulse test	25	100

Operative procedure

Operative procedure	Number of patients	percentage
Herniorraphy only	25	100
Resection anastomosis	3	12
Omentectomy	5	20
Orchidectomy	5	20

All inguinal were right sided 18 and left sided were 7 in number.

Smallest age were 2 year of age and highest age were 85 years.

Out of 25 cases, 22 were male and 3 were female. Sign of obstruction were present in 22 patients. All patients presented with irreducible swelling and were negative for cough impulse. 24 patients shows sign of obstruction except one in female patient due to obstructed sac content were ovary and fallopian tubes.

Naso gastric tube put in all patients and catheterization done preoperatively in 24 patient except one case in which intra operative bladder injury was there.

Operative findings :-

Resection anastomosis 3cases, Sac contents were Ovary 1, Fallopian tube 1, Small intestine 12, Omentum 10, Urinary bladder 1, orchidectomy 5, Bassini repair 20, Mess repair 5, Hospital stay 3-7 days, Wound infection 3 cases, 2 patients presented previouly operated inguinal hernia, 2 patients associated with UDT (un descended testes) Most complications with strangulated hernias occur because of lack of treatment. The tissue that has been cut off from the blood supply can quickly die off. This leads to a potentially life-threatening situation, as this dead tissue releases toxins and bacteria into the bloodstream that can cause blood infections, sepsis, and death. Hernias may become

incarcerated when the herniated tissue gets trapped and cannot move back into place, but the blood supply to the tissues has not been cut off. However incarcerated hernias can easily lead to strangulated hernias. The rate of incarceration in inguinal hernias has been variably reported between 3 and 18% with higher incidence among infants[2] Sometimes, these hernias would be incarcerated, leading to strangulation of tissues entrapped if without timely treatment. Among female infants with incarcerated hernia, 82% of these cases involve ovarian structures[3] Incarcerated ovarian herniation is more likely to result in strangulated ovary hernia (SOH) due to serious blockage of blood supply to ovary[4]. the incarcerated ovaries were mildly swollen and bruised.

incarcerated hernias are not a medical emergency, but should still be treated quickly to prevent them becoming strangulated. Investigations Ultrasound is the less invasive method, if there is doubt. MRI or CT scanning may also be used[5,6].

Herniography with injection of X-ray contrast agent into the peritoneum is rarely necessary[7]. Emergency hernia surgery carries a high mortality in elderly patients[8] .The European Hernia Society (EHS) presented the EHS Guidelines for the Treatment of Inguinal Hernia in Adult Patients[9]. strangulated ovarian hernia (SOH) The single variant analysis revealed that times of manual reduction, ovarian volume, ovary with or without multiple cysts, ovary torsion or not and angle of ovary torsion were found to be significant factors associated with SOH. The multivariate analysis showed ovarian volume was evidenced as an independent risk factor for SOH[10].

RESULTS–

All patients of obstructed inguinal hernia were presented in acute emergencies with complaining of irreducible swelling with signs and symptoms of intestinal obstruction in all age groups during study period were evaluated. All patients were operated in emergencies. All patients were of low socio economic condition out of 25 cases 3 cases resection anastomosis, 5 cases orchidectomy done for better repair in old age group majority of cases were in age group 6^{th} to 8^{th} decade. Strangulation was present in three patients of older age. Incidence of inguinal hernia commonly seen in males more common in right side.

DISCUSSION-

complicated inguinal hernia seen in low and middle socio economic category of people. Clinical Presentation are comfortless crying and a swelling in the inguinal region. The swelling is often tense, tender and not reducible. There may be vomiting and abdominal distension. The infant may deteriorate so careful monitoring and prompt intervention is necessary. Cumulative risk of strangulation increased with the time. Inguinal hernia more commonly presented in Male :Female is 18:7 more on right side in 72% cases. All patients were underwent modified bassini repair technique irrespective of case being clean or contaminated. Use of prosthesis proline mess must be reserve for cases in which viability of intestine is assured where the operation take place in an aseptic setting. Use of monofilament poly propylene mess in emergency hernia operation is safe, simple as effective as incidence of mess related complication were negligible in our study

CONCLUSION-

All patients should be timely diagnosed and prompt treatment is necessary to reduce and prevent complications. In each patient preoperatively naso gastric tube and catheterization must be accompanied with surgery.

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