WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.084
Volume 10, Issue 12, 1595-1603. Case Study ISSN 2277–7105

MANAGEMENT OF INCISIONAL HERINA – A CASE STUDY

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Article Received on
03 Aug. 2021,

Revised on 24 Aug. 2021,
Accepted on 13 Sept. 2021

DOI: 10.20959/wjpr202112-21756

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ABSTRACT

Introduction: The incidence of incisional hernia depends on many factors including old age, sex, obesity, bowel surgery, repeated abdominal surgerys, suture type, chest infection, abdominal distension and wound infection. **Case report:** A 65 years old woman presented at out institute, she had undergone multiple abdominal surgery 28 yrs years ago had come with abdominal swelling since 3 months abdominal pain, anorexia with k/c/o DM/HTN/IHD. **Discussion:** this case report proved to manage incisional hernioplasty. **Conclusion:** Incisional hernia is a very common complication after surgery. Good care and precautions are very important to avoid its development.

KEYWORDS: Incisional hernia, surgery, ventral hernia, trauma.

INTRODUCTION

Ayurveda has eight branches. Surgery is one of the important branches of ayurveda. Ventral hernias are defects that can occur at the abdominal wall near the site of a prior surgical incision. They often originate due to poor wound healing or tissue healing failure. Incisional hernias are one of the most common complications after abdominal surgery, with an estimated incidence as high as 10%–20% following midline incisions.

Risk factors for developing incisional hernias include smoking, diabetes and older age. The morbidity and recurrence rates after surgery are significantly influenced by obesity.

The surgical repair often depends on the size of the hernia and may use components separation, synthetic mesh overlay or even a biological mesh underlay to completely fix the

defect. Furthermore, the operative repair has to balance the ability to completely repair the defect without increasing the risk of post-operative complications, given its association with hernia recurrence.

A hernia is an abnormal protrusion of a part or whole of viscus through an abnormal opening in the wall of the cavity which contains it. Here is an external abdominal hernia is protrusion of abdominal viscus through a weak spot in the abdominal wall.

The common external hernia are: inguinal hernia- 73%, femoral hernia- 17%, umbilical hernia-8.5%, incisional hernia, other 1.5% other 1.5 % Epigastic, lumbar, spiligelian, obturator, gluteal.

Mainly 2 factors play in causing a hernia.
1. weakness of the abdominal musculature.
2. increased abdominal pressure which forces the content out through the normal abdominal musculature.

- **CONGENITAL WEAKNESS**

Persistence of processus vaginalis- this causes indirect complete inguinal hernia. It is a sort of performed sac through which the contents herniated Similarly patent canal of nuck in female causes indirect inguinal herni Incomplete obliteration of umbilicus may lead to infantile umbilical hernia

- **ACQUIRED WEAKNESS-** excessive fat in the abdomen causes weakness of the abdominal musculature fat separates muscle weakness. This causes the appearance of direct inguinal hernia, paraumbilical hernia or hitus hernia.
- Muscle weakness may follow repeated pregnancy
- Surgical; incisions may lead to division of nerve fibres and thus causes muscle weakness
- Incisional hernia develops through weakend abdominal muscle following a previous operation.

- **INCISIONAL HERNIA** (ventral hernia or postoperative hernia).

An incisional hernia is one which occurs through an acquired scar in the abdominal wall caused by a previous surgical operation or an accidental trauma, scar tissue is inelastic and can be stretched easily if subjected to constant strain.

Aetiology

- **Predisposing Factors**

Vertical scar, midline scar, lower abdominal scar may injure the nerves of the abdominal muscles.

- Scar of major surgeries (biliary, pancreatic). Scar of emergency surgeries (peritonitis, acute abdomen).
- Faulty technique of closure.
- Poor nutritional status of the patient.
- Presence of cough, tuberculosis, jaundice, anaemia, hypoproteinaemia.
- Malignaney, immuno suppression.
- Smoking in postoperative period.Causes which inereases the intra-abdominal pressure (BPH, straining, stricture urethra or rectum, ascites).

Factors responsible for development of Incisional hernia Vertical incision has got higher chances of incisional hernia than horizontal incision Layered closure of the abdomen has got higher chance than single layer Continuous closure has got higher chances than interrupted closure. Using absorbable suture material has got higher chances of hernia than non-absorbable sutures. Emergency surgical wound has higher chances than elective surgical wound. Laparotomy for peritonitis, acute abdomen, and trauma can commonly cause incisional hernia. Drainage through the main laparotomy wound may precipitate formation of incisional hernia Chronic cough. smoking, obstructive uropathy, constipation can precipitate incisional hernia Diabetes, old age, malnutrition, malignancy, anaemia, hypoproteinaemia, jaundice, ascites, liver disease, uraemia, steroid therapy, immunosuppressive diseases are other precipitating factors We aim to report the case of a ventral incisional hernia in 65-year-old women and discuss its treatment and outcomes.

CASE STUDY REPORT

An 65 yrs female patient came with huge abdominal swelling since 3 months Over previous surgical scars. There is irreducible swelling with abdominal pain with anorexia since 6 months, the abdominal swelling is painful, patient adviced to do hernioplasty under sutaible anesthesia.

Aims and objectives: To study the role of incisional hernioplasty in incisional hernia.

Type of study: observational single case study without control group.

Study centre: ARSMH college of ayurved and research centre nigdi, pune.

Study details: age- 65 yrs, gender- female, religion- hindu, occupation- housewife, diet- vegetarian.

Chief complaints: abdominal swelling at scar region, mild abdominal pain, anorexia, frequency of micturition.

Brief history: a abdominal painful swelling below umbilical region since 3 months gradually this ulcer had been gone increasing in nature so patient came at ayurvedic hospital for further management.

On examination: cardiac other systematic changes and general debility so fitness from anesthiologist.

Past medical history

k/c/o- DM/HTN/IHD- on regular treatment

past surgical history

4 times vertical sections before 28 yrs

Hip repleasement before 10 yrs back

CABG and angiography before 5 yrs

Family history: not significant.

Local examinations: site-swelling at below umbilical region.

Duration- 3months

Size- 10*7 cms

Shape- oval shape

Tenderness- ++

Lab reports: Hb-10.1gm, wbc-11900Cu mm, plt-38600/Cu mm Sr electrolytes- sr. sodium-134, sr.potassium- 4.3, sr.chloride- 96 Bsl- 221 mg/dl Blood urea- 28mg/dl Sr. creatinine-0.85mg/dl.

HIV/Hbsag-Neg.

CT ABDO-PELVIS:- 22/10/20 small defect in the infraumblical anterior abdominal wall in laft paramedian plane and showing herniation of omental fat s/o- incisional hernia.

TREATMENT AND OUTCOME

Preoperative-Preparation

1- Control of diabetes and smoking cessation

2- Pre operative blood and urine tests ECG and a chest x-ray

3-Discontinue medications as aspirin or anticoagulant drugs

4. The night before surgery patients must not eat or drink anything

5. Place intravenous line to deliver fluid and medicatin during surgery

6. Pre-operative antibiotics

Treatment

Two Operative Techniques

1. Simple apposition

2. Complex apposition

3. Plastic. fiber. mesh

Procedure

supine position given.

Epidural anaesthesia given under all AAP.

Painting and drapping done.

Midline incision taken over hernial site including previous operative scar.

Hernial defect identified and resolve adhesions separate omentum from sac bowel content reduced.

Linia alba is retracted with use of volkman's retractor this allow idedtification of posterior rectus fascia, Posterior rectus fascia is incised few millimeter from the midline.

Rectus sheeth is opened in vertical direction.

The rectus muscle fibre are identified and retromuscular plane is open.

The retromuscular plane is dissected upto lateral border of the rectus muscle.

Dissected posterior rectus sheeth is sutured tension free.

Measure the space for mesh placement, mesh fixed over posterior rectus fascia with parashuit technique.

Later on anterior rectus sheeth is closed above the mesh with continues reabsorbable suture.

Put the drain in abdominal cavity.

Abdominal closed layerwise.

Subcutaneous tissue is sutured.

Skin is sutured and dressing done.

Patient had given IV antibiotic post operatively for 5 days. Then oral antibiotics and analgesics for next 7 days. After three consecutive days Cleaning and Dressing done. Epidural catheter is removed after 24 hrs.

Post operative care

The patient will be observed in a recovery area for several hours, for monitoring of body vitals. Patients will usually be discharged on the day of the surgery. If uncomplicated hernia. Antibiotics may be prescribed to help prevent post operative infection.

Post operative complications

Fluid build up at the site of mesh placement

Post operative bleeding

Prolonged suture pain

Intestinal injury

Nerve injury

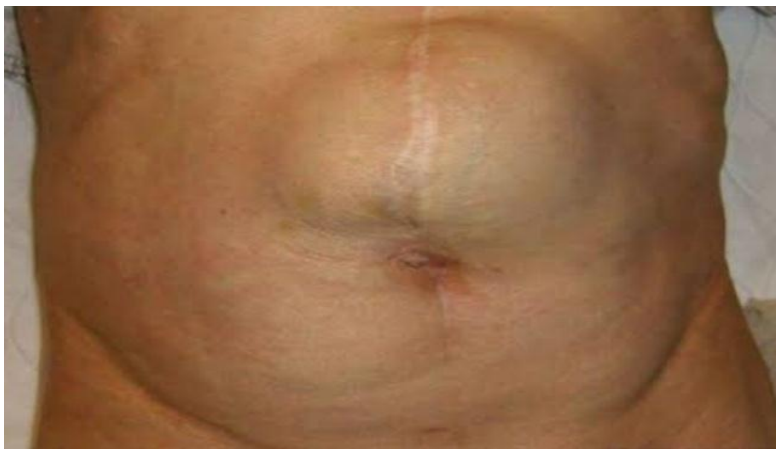
Fever

Intra-abdominal abscess

Urinary retention

Respiratory distress

1.



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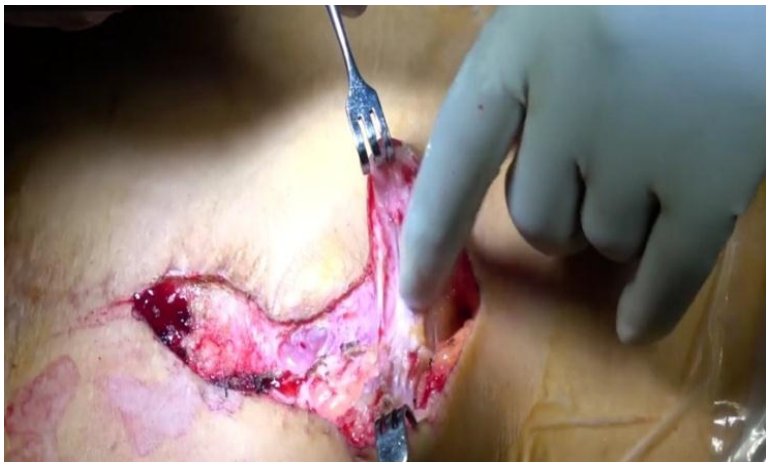

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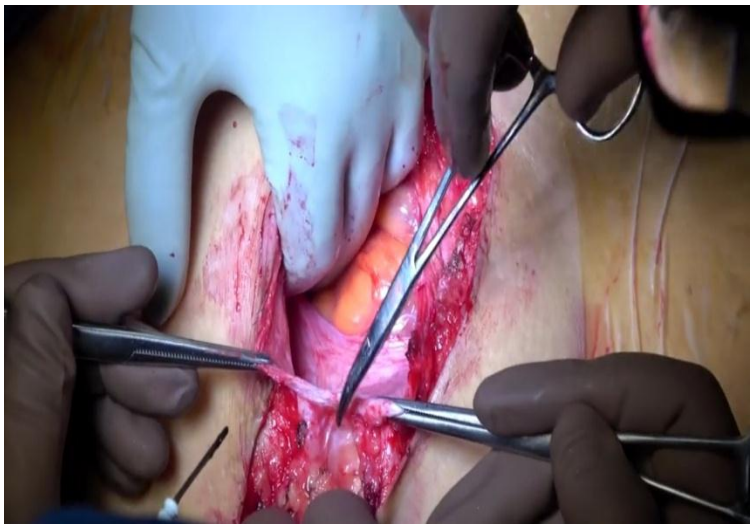

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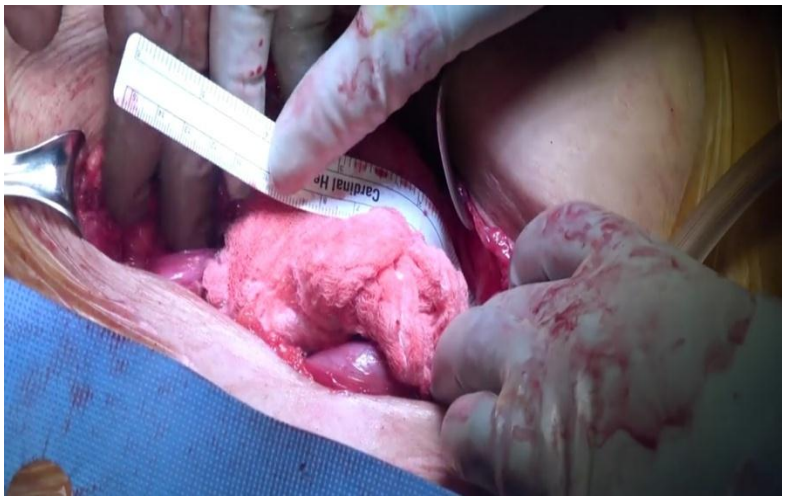

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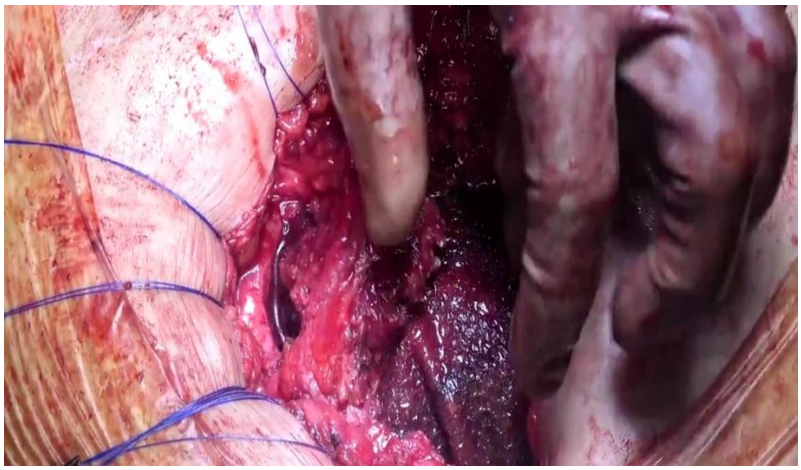

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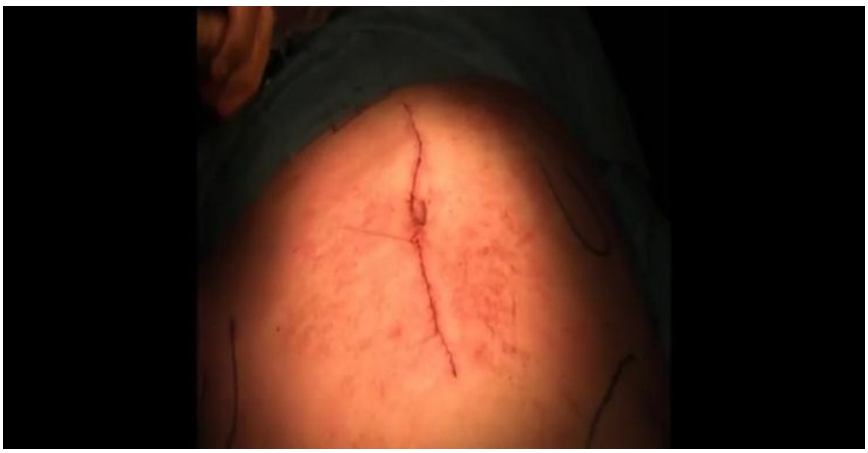

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