

# Strangulated Femoral Hernia in a Female - A Case Report

Dr Ramesh Kumar Korumilli<sup>1</sup>, Dr Jakkula Srikanth<sup>2</sup>, Dr Sri Harsha Muvva<sup>3</sup>, Dr Anurag Polasani<sup>4</sup>

<sup>1</sup>Professor and HOD, General surgery, SVS Medical College, Dr KNR university of Health Sciences, India

<sup>2</sup>Post-Graduates of General Surgery, SVS Medical College, Dr KNR university of Health Sciences, India

<sup>3</sup>Post-Graduates of General Surgery, SVS Medical College, Dr KNR university of Health Sciences, India

<sup>4</sup>Post-Graduates of General Surgery, SVS Medical College, Dr KNR university of Health Sciences, India

**Abstract:** *Most common hernias in females are Inguinal hernia, however femoral hernias occur more commonly in females when compared to their male counterparts. Femoral hernias account for about 20% of hernias in women and 5% in men. Here we present a case of 65 year old female patient presented with an irreducible swelling in right groin region with atypical presentation. Based on our clinical findings and sonological studies, a diagnosis of strangulated femoral hernia was made. Resection and anastomosis of the gangrenous portion bowel along with hernia repair was done. Post op was uneventful and patient is on regular follow-up.*

**Keywords:** Femoral hernia, Female, resection and anastomosis, Strangulated

## 1. Introduction

Femoral hernias form the third most common type of primary hernias. They are more common in females when compared to males with an incidence ratio of 4:1. Approximately 40 % of femoral hernias present with strangulation. Strangulated hernias are one of the leading causes of acute intestinal obstruction.<sup>[1]</sup> Hence, it is very important to treat femoral hernias electively as soon as they are diagnosed.

Clinical diagnosis of femoral hernia can be sometimes challenging. Differential diagnosis includes inguinal hernia, saphena varicocel, groin lymphadenopathy, lipoma, femoral artery aneurysm, and psoas muscle abscess. Risk of tissue necrosis or strangulation in the femoral hernias is more when compared to other types of hernia.<sup>[2]</sup> Diagnosis should be made with help of radiological modalities. Conservative management like truss will increase the risk of strangulation, surgical treatment is the only modality of treatment.

## 2. Case Report

A 65 year old female patient was admitted with chief complaints of irreducible swelling in right groin of three days duration which was associated with pain. She gave history of reducibility in the past. No history of vomitings, Constipation and fever. Blood pressure was normal, pulse rate was 90 per minute. On local examination, there was a swelling of 6x3 cm in right groin below and lateral to the pubic tubercle, which was firm in consistency. Cough impulse was absent and swelling was not reducible. It was not associated with local rise of temperature and tenderness. No abdominal distention, no hepatosplenomegaly. Per rectal examination was normal. A provisional clinical diagnosis of irreducible femoral hernia was made. Ultrasonography revealed bowel and omentum as contents which are not taking color flow on Doppler suggesting a compromised vascular supply. X-ray erect abdomen showed few air filled bowel loops without

any air fluid level. Routine blood investigations were done and found to be within normal levels.



Figure 1: Pre Operative



Figure 2: Intra Operative

Patient was taken up for the surgery. Initially an Inguinal incision was given and upon dissecting, the neck of the sac was found to be originating near femoral ring. The sac was very tense and a 10 cm loop of small bowel was found to be as content with gangrenous changes. Attempts were made to resuscitate the bowel loop with help of warm saline and oxygen which were futile. Abdomen was opened through a lower sub umbilical incision, and about 10 cm gangrenous

ileum was found approximately 30 cm away from ileo-caecal junction. Resection of the gangrenous bowel followed by anastomosis with double layered continuous technique. Hernia repair was done by McEvedys high approach. Abdominal drains were placed. Post-operative period was uneventful. Patient has been under regular followup.

### 3. Discussion

Strangulated femoral hernia is not a common presentation and when it occurs, it is life-threatening. The most important symptom is typically a painful bulge, placed on the medial aspect of the thigh with or without symptoms of obstruction. Differential diagnosis include inguinal lymph nodes, direct and indirect inguinal hernia, hydrocele of the cord or canal of Nuck, the great saphenous vein varices, femoral artery aneurysm, ectopic testis and psoas abscess.<sup>[3,4]</sup> Hence it is very important to accurately diagnose before performing any invasive procedure in groin region. Due to the higher risk of complications associated with femoral hernia it is now recommended that all the femoral hernias should be repaired unless there are any specific contra-indications. When the complications like intestinal obstruction or strangulation occurs especially in elderly, the mortality rate increases atleast by 9 to 10 folds.

After thorough clinical examination and with the help of imaging modalities like ultra sonography, X-ray erect abdomen and computerized tomography are useful in determining the diagnosis of femoral hernia along with its associated complications like obstruction, strangulation etc.

Three approaches have been described for open surgery: Lockwood's infra-inguinal approach, Lotheissen's trans-inguinal approach and McEvedy's high approach. The infra-inguinal approach is the chosen method for elective repair while McEvedy's approach is preferred in case of suspected strangulation or obstruction. However most commonly preferred method in our experience is to do an exploratory laprotomy along with repair of the defect as it allows to thoroughly explore the bowel loops and other contents. Mesh repair of the floor is not preferred in case of emergency femoral hernia because of high chances of infection due to contamination.<sup>[6]</sup> Laparoscopic management of femoral hernias using Total Extra Peritoneal (TEP) or Trans Abdominal Pre Peritoneal (TAPP) repairs have also been described in literature.<sup>[7]</sup> Laproscopic procedures have shown less recurrence rates and associated with less post operative pain, however they are expensive, need higher surgical skills and are preferred in elective surgeries rather than in emergencies<sup>[8]</sup>

### 4. Conclusion

In any case of groin swellings, a proper history should be obtained from the patients and a thorough clinical examination along with appropriate investigations must be done before planning for further management. Strangulated femoral hernia is a rare surgical emergency associated with higher mortality. Hence immediate surgical management is required.

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