UMBILICAL HERNIA: A CASE REPORT

S.B Gadgil*1 and K.B Khairnar2

1Associate Professor, Department of Radio diagnosis, 2Assistant Professor, Department of Anatomy,
Dr.Vasantrao Pawar Medical College, Adgaon, Nasik, Maharashtra 422003, India.

Corresponding Author:- K.B.Khairnar
E-mail: khairnarkaran@gmail.com

ABSTRACT
An umbilical hernia is caused by a weakness of the connective tissue and abdominal muscles around the umbilicus. This weakness creates an opening, known as a defect, which allows for underlying fat or intestine to protrude through the abdominal wall and form a bulge under the skin in or around your umbilicus. Umbilical hernias are frequently seen in children, but they are also common in adults. In children, the defects often close with age and may not require surgery. An acquired umbilical hernia directly results from increased intra-abdominal pressure caused by obesity, heavy lifting, a long history of coughing, or multiple pregnancies. In adults, umbilical hernias do not heal themselves and can only be repaired with surgery. So here is an attempt to go through the details of case and discuss it thoroughly as it is one of the commonest hernias in routine practice. We have reported a case of 55 years male with acquired umbilicus hernia as it is so common and must be discussed to help surgeons, radiologists.

INTRODUCTION
An umbilical hernia occurs when part of the intestine protrudes through an opening in the abdominal muscles (Figure 1). Umbilical hernia is a common and typically harmless condition. Umbilical hernias are most common in infants, but they can affect adults as well. Congenital umbilical hernia is a congenital malformation of the umbilicus. Among adults, it is three times more common in women than in men; among children, the ratio is roughly equal [1]. It is also found to be more common in children of African descent. An acquired umbilical hernia directly results from increased intra-abdominal pressure caused by obesity, heavy lifting, a long history of coughing, or multiple pregnancies [2].

Incisional hernia is a risk of any abdominal surgery and is estimated to occur in 15% of abdominal operations [3]. They are caused essentially by failure of the wound to heal but are probably the result of multiple patient and technical factors. Adult umbilical hernia - 90% of these are acquired - e.g. in women they are associated with multiple pregnancies and difficult labour, but they are also found in cases of abdominal swelling - e.g. ascites and obesity. They result in both high levels of mortality and morbidity.

A case of 55 year male reported with A bulge near the belly button with Abdominal pain which worsened when coughing or straining. Patient was giving h/o straining while moving or lifting heavy objects.

OBSERVATION:
Provisional Diagnosis was by made on sonography (Figure 2) mentioning a 22 mm defect noted in anterior abdominal wall near umbilicus with bowel loops, parietal peritoneum and omentum as a contents. Herniated bowel loops show normal peristalsis. Follow up by CT scan was advised for confirmation of the USG findings.

CT scan confirmed the findings showing midline defect in anterior abdominal wall of size 2.2cm wide with herniation of omentum, parietal peritoneum and small bowel loops.
DISCUSSION

An anterior abdominal wall composed of muscles, superficial fascia, skin from within outward. Umbilicus is a natural scar. Embryologically it is the site of attachment of embryonic folds and systems. So umbilicus is a potential site of weakness.

An adult umbilical hernia (acquired) occurs when the connective tissue (fascia) of the abdominal wall becomes weak around the area of the navel. The weakening occurs over a period of years until eventually the abdominal contents, encased in a sac, protrude through the abdominal wall, and a bulge forms around the umbilicus. A newly formed umbilical hernia is usually small and contains only the fatty omentum. However, as more of the abdominal contents (transverse colon, small intestine, greater omentum) push into the sac, the umbilical hernia can grow in size. The diagnosis is made based on the history and physical exam, and tests are usually not needed. However, the physician may use CT imaging, ultrasound, or x-ray aided by contrast material to visualize the herniated contents.

If necessary, umbilical hernias can be treated with surgery to push the bulge back into place and strengthen the weakness in the abdominal wall. This operation may be recommended for your child if the hernia is large or has not disappeared by the time they reach four or five years old. In the case of the umbilical hernia of the adult, surgical repair should be performed as early as possible. The presence of cirrhosis and ascites should not discourage repair, as strangulation, incarceration, and rupture are particularly dangerous in patients with these disorders.

Significant ascites, however, should first be thoroughly treated, as morbidity and recurrence rate are much higher after hernia repair in patients with that condition [4].

SUMMARY AND CONCLUSION

We have reported a case of acquired umbilical hernia who was doing strenuous work. Umbilical hernias are very common problems. Surgery is the only definitive treatment for an adult with umbilical hernias. Not all hernias need to be immediately repaired, but they tend to grow over time and always carry a risk of incarceration or strangulation, which can lead to a life-threatening situation requiring emergent surgery. Repair of hernias can be performed either open or laparoscopically. When electively repaired, umbilical hernia repair reinforced with a prosthetic mesh is associated with a very lower recurrence rate and is often recommended. However, surgery is recommended for most adults with an umbilical hernia, because the hernia is unlikely to get better by itself when you are older and the risk of complications is higher. Urgent repair is required particularly where the patient is obese [5]. Recurrence occurs in up to 50% of large hernias. Strenuous activities will need for be limited for a few weeks after the operation and a week or two off school or work is often advised. Most people are able to return to all their normal activities within a month of surgery. Complications that can develop as a result of an umbilical hernia include obstruction and strangulation. So our study is helpful to not only radiologists but also to surgeons, physicians also.

REFERENCES