



An Unusual Case of Umbilical Hernia Presenting as Persistent Umbilical Discharge- A Case Report and Breif Review

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KEYWORDS

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Methicillin
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(MRSA),
Umbilical
herniorrhaphy

ABSTRACT:

The typical presentation of an umbilical hernia is a bulge close to the umbilicus, although in adults, the condition is rarely accompanied by discharge from the umbilicus. This case study details the unusual way a 30-year-old lady with hypothyroidism presented with an umbilical hernia. For four years, the patient had intermittent purulent discharge from the umbilicus, with a noticeable rise in discharge during the last two months, and abdominal pain for five months.

Introduction: An umbilical hernia may be described as a condition in which the ventral abdominal fascia is weak at the level of umbilicus or slightly below this point. Hernias are very prevalent and most primary clinical assessments are used in diagnosis of umbilical hernias. It is possible to fix umbilical hernias without surgery, but approximately 64% of adults who have the condition will need a surgical procedure later in life. Anticipated umbilical hernia should be repaired before they become incarcerated and later strangulated with contents such as the omentum or colon. Umbilical herniorrhaphy can be performed by several techniques during surgery and might involve the use of a synthetic or biologic mesh.

Objectives: A 30-year-old female patient with hypothyroidism arrived with complaints of intermittent, pecking abdominal pain that worsened with food intake and was relieved by analgesics. She also complained of intermittent, purulent, intermittent umbilical discharge that had increased over the previous two months for the previous four years.

Methods: UMBILICAL EXPLORATION AND HERNIORRAPHY ,

Results: Post operatively the patient recovered without any complications Initial Umbilical discharge at the time of presentation subsided post herniorrhaphy.

Conclusions: In this case study, a 30-year-old hypothyroid woman with a persistent umbilical discharge showed an uncommon appearance. For several years, the patient's primary complaints were purulent umbilical discharge and sporadic abdominal pain. Interestingly,all imaging showed the presence of a collection in the subcutaneous plane of the umbilical region with no apparent hernial defect /hernial content.During the surgery, it was discovered that there was a tiny umbilical hernia containing omentum. Imaging scans had shown a collection in the umbilical region with no intabdominal communication /sinuses /tracts.

The purulent discharge contained Methicillin-resistant Staphylococcus aureus (MRSA) cultures. Interestingly ,The patient's symptoms disappeared after herniorrhaphy and umbilical investigation.

As a result of this rare anomaly and subsequent cessation of discharge post procedure,we can



hypothesize that in cases such as this of a persistent umbilical discharge where the usual causes such as urachal cyst/tracts/sinuses communicating intraabdominally have been ruled out a surgeon must consider the the likelihood of an underlying umbilical hernia necessitating prompt management.

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1. Objectives

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SURGICAL HISTORY

Laparoscopic sterilization 4 years ago

OBSTERIC HISTORY

P2L2- BOTH NVDs

INVESTIGATIONS

USG abdomen showed a linear heterogenous collection with air pockets in the umbilical region

CECT Abdomen showed a subcutaneous collection in the umbilical region

No abnormal umbilical tracts/ communications

PUS C/S of the umbilical discharge -Methicillin resistant staphylococcus aureus grown in culture

INTRAOPERATIVE FINDINGS

No umbilical sinus/tract/abnormal intra abdominal communication .

> Incidentally an umbilical hernia was discovered with a defect of ~1 cm with omentum as its content for which a herniorrhaphy was done .

> A specimen of the omentum was sent for histopathological examination .

2. Methods

UMBILICAL exploration and herniorrhaphy are two main surgical repair options for umbilical hernias: suture repair and mesh. Primary suture repair is performed either by simple primary suture repair which can be used for small defects (<2 cm) or by using Mayo technique which is basically an overlapping abdominal wall fascia in a “vest-over-pants” manner which was described by William Mayo in 1901. Mesh repair can be performed via both open or laparoscopic approaches. Open mesh repair can either be placed as onlay or sublay fashion; the onlay mesh placement is the technically easier but associated with higher wound complications e.g. seroma or hematoma and surgical site infection in some cases. Preperitoneal or sublay mesh placement requires more surgical skill and experience but less recurrence and wound complications. Some surgeons prefer leaving fascial margins without approximation; however, fascial closure before onlay mesh or after preperitoneal mesh is recommended. Laparoscopic mesh repair can be performed either via transabdominal preperitoneal approach (TAPP) or intraperitoneal onlay mesh (IPOM) technique.

3. Results

Post operatively the patient recovered without any complications

Initial Umbilical discharge at the time of presentation subsided post herniorrhaphy.



FIG A: INITIAL EXPLORATION FOLLOWING AN INFRA UMBILICAL INCISION (SMILEY INCISION) - NO SINUS TRACTS /INTRAABDOMINAL COLLECTION /COMMUNICATIONS DISCOVERED.

FIG B: FURTHER EXPLORATION REVEALED A SMALL DEFECT OF SIZE ~1CM CONTENT OF WHICH WAS OMENTUM

FIG C: ANATOMICAL CLOSURE OF DEFECT USING 2-0 PROLENE AFTER REDUCING OMENTAL CONTENT INTO THE PERITONEUM

FIG D: SKIN CLOSURE DONE USING 3-0 ETHILON AFTER PLACING A DRAIN IN THE SUBCUTANEOUS PLANE(SUPERIOR TO ANT.RECTUS SHEATH)

HISTOPATHOLOGY

Sections show fatty tissue with tiny strands of fibrous tissue and congested blood vessels.

No hamartomatous tissue seen.

Microscopy showed features consistent with fatty tissue confirming omental content of hernia

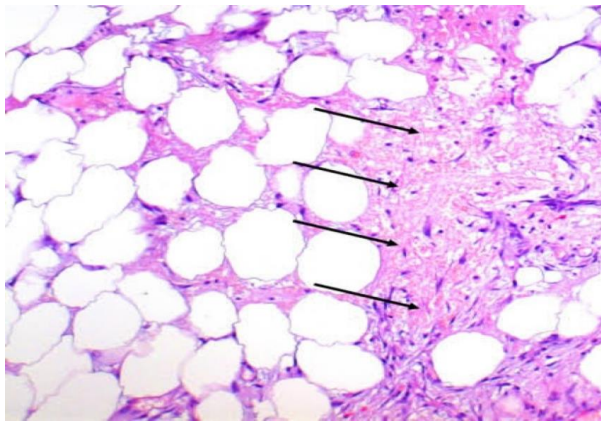


FIG E :HISTOPATHOLOGY PICTURE CONSISTENT WITH FATTY TISSUE – OMENTUM



FIG H: USG ABDOMEN SHOWING A LINEAR HETEROGENOUS COLLECTION WITH AIR POCKETS IN THE UMBILICAL REGION

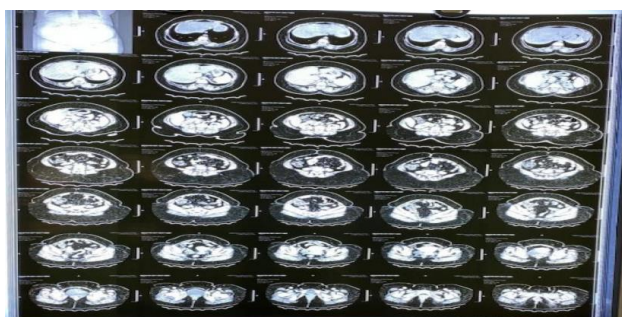
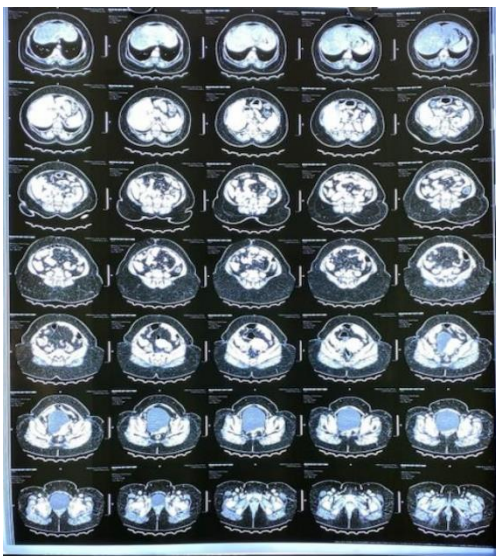


FIG F & FIG G: CECT ABDOMEN SHOWING A COLLECTION IN THE SUBCUTANEOUS PLANE IN THE UMBILICAL REGION (NO EVIDENCE OF HERNIA)

4. Discussion

Ventral hernias at or close to the umbilicus are known as umbilical hernias. The umbilical hernia is classified as an abdominal wall hernia by the European Hernia Society as a hernia that is situated between 3 cm above and 3 cm below the umbilicus. It makes up 6%–14% of all adult abdominal wall hernias and is the second most prevalent kind in adults after inguinal hernias. Ninety percent of adults develop umbilical hernias. Just 10% of adult cases of umbilical hernia indicate a prior childhood hernia. It is more common in women or individuals with increased intra-abdominal pressure as in pregnancy, obesity, ascites, or chronic abdominal distention. Umbilical discharge in adult is rare and is usually induced by foreign material, most commonly hair. Rarely, it may be due to embryonal anomalies such as persistent urachus/urachal cyst or omphalomesenteric cyst.

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