UNUSUAL PRESENTATION OF TWO DEFECTS IN A NON VERTICAL INCISIONAL HERNIA
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INTRODUCTION
The incidence for incisional hernia is common in vertical incision, however exact incidence through non vertical incision like Kocher’s incision for cholecystectomy, lumbar incision for kidney operation, pfannenstiel incision for hysterectomy or pelvic operations or grid iron incision for appendicetomy is less than 1%. The incidence depends on patient profile and technical factors. The technique for anatomical repair for incisional hernia is safe for small defects, but for large defects tension free repair using synthetic mesh is the standard method. The unusual presentation of intestinal obstruction in an incisional hernia through pfannenstiel incision, with one defect having obstructed bowel in it and the other was empty which was reported in surgery department of C.U.SHAH Medical College, Surendranagar,Gujarat.

CASE HISTORY
A female patient of 75 years presented in the emergency department of C U Shah Medical College with diffuse abdominal pain and vomiting since one day and two swellings over lower abdomen since ten years which were gradually increasing in size and one swelling became painful since one day (Figure 1).

She was also an old case of diabetes and hypertension since seven years and had undergone abdominal hysterectomy through a pfannenstiel incision before twenty years. After hysterectomy, she was asymptomatic for ten years till she noticed two small lumps which were gradually increasing in size since then. On examination she had tachycardia, blood pressure under control, lungs clear, abdomen tender with localized guarding and two swellings in lower abdomen over pfannenstiel incision, with one swelling of size 20 x 15cm, tender, not reducible and other swelling of 22 x 18 cm with lax skin covering it and a palpable gap of 5 x 3cm gap in the incision line with positive cough impulse. She was diagnosed as a case of obstructed incisional hernia which was confirmed by ultrasonography of the abdomen. Patient was operated on emergency basis and the defect was repaired with synthetic mesh.

ABSTRACT
The incidence for incisional hernia is common in vertical incision, however exact incidence through non vertical incision like Kocher’s incision for cholecystectomy, lumbar incision for kidney operation, pfannenstiel incision for hysterectomy or pelvic operations or grid iron incision for appendicetomy is less than 1%. The incidence depends on patient profile and technical factors. The technique for anatomical repair for incisional hernia is safe for small defects, but for large defects tension free repair using synthetic mesh is the standard method. The unusual presentation of intestinal obstruction in an incisional hernia through pfannenstiel incision, with one defect having obstructed bowel in it and the other was empty which was reported in surgery department of C.U.SHAH Medical College, Surendranagar,Gujarat.

Keywords: Two defects, Non vertical incision, Incisional hernia

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Two defects in incisional hernia

DISCUSSION
Incisional hernia usually starts as a symptomless partial disruption of deeper layers of a laparotomy wound during immediate or very early postoperative period. Incisional hernia can occur from any incision; but they occur more commonly along a straight line from the xiphoid process of the breastbone straight down to the pubic bone, and are less common for non vertical incision like pfannenstiel incision as it is parallel to the line of muscle fibres. With abdominal wall contraction as in coughing or straining the edges of vertical incision tends to distract in contrast to approximation in case of transverse incision. The mechanism of incisional hernia formation is most often attributed to early mechanical wound failure as a result of either the pulling through of suture passed through adjacent wound tissue, too loose or too-tight suture placement or suture failure all occurring at a time when wound tensile strength is essentially zero. Tension on the suture line impedes the microcirculation and local tissue oxygenation and proper hydroxylation of prolene and lysine hence proper cross linking does not occur and ultimately results in poor scar organisation. There are many etiological factors responsible for incisional hernia like poor surgical technique, post operative wound infection, old age, general debility, obesity, postoperative pulmonary complications, placement of drains or stomas in the primary operative wound, intra-operative blood loss greater than 1000 ml. When more than one factor co-exist in the same patient, the likelihood of post operative wound failure is greatly increased. The causative factor in this case is age and associated conditions like diabetes, hypertension and obesity. Patients with an incisional hernia often report an aesthetic appearance or suffer from discomfort, pain, or rarely, intestinal obstruction. Once an incisional hernia occurs, the natural history of it is to grow. Delay in repair complicates every single aspect of the surgery and leads to increased morbidity; so repair should be done as soon as possible. Preventive measures such as – losing weight, strengthening abdominal muscles through regular moderate exercise, reducing abdominal pressure by avoiding constipation, learning to lift heavy objects in a safe, low-strain way using arm and leg muscles and controlling diabetes and poor metabolism with regular medical care and dietary changes as recommended. Repair of incisional hernia can be done by open or by laparoscopic method. In open method the scarred skin and subcutaneous tissue is removed and the sac is dissected carefully, the neck of the sac is incised and the contents of the sac are dropped back in the abdomen once their viability is checked. In case of gangrenous omentum it can be excised and for the bowel, resection and anastomosis is done. The edges of the fascial defect should be solid fascial tissue rather than scar for closure. A primary
fascial closure should be used only if the fascia can be brought together without tension. In those cases where primary closure cannot be done the defect is closed using non-absorbable mesh like Prolene, polytetrafluoroethylene (PTFE) or DacronTM. The various techniques for meshplasty are the onlay repair (the fascial edges are brought together and the mesh is placed over the suture line); the inlay repair (the mesh like Dacron or PTFE is sutured to the fascial edges without initially closing the defect and hence mesh is directly in contact with viscera and may develop bowel adhesions and so it is the last choice of repair) and the sublay repair (the mesh is placed beneath the rectus muscle in front of the posterior rectus sheath and the peritoneum. Laparoscopic repair of the incisional hernia is a relatively new technique and the patients undergoing laparoscopic repair have been reported to have fewer postoperative complications than those receiving open repair. Here, after creation of the pneumoperitoneum and port placement, the hernial contents are reduced in the peritoneal cavity and the mesh is placed to overlap the defect and fixed with clips and sutures. Main advantage of open repair over laparoscopic repair is the closure of rectus muscle in the midline, which gives better cosmetic and functional results. The occurrence of an incisional hernia more than 20 years after abdominal hysterectomy in a pfannensteil incision with two defects is very rare.

**CONCLUSION**

Incisional hernia through non vertical incision like pfannenstiel incision is rare. However, it can occur due to patient related or surgical technique related factors and early diagnosis and treatment has to be offered to the patient to prevent its complications.

**REFERENCES**