HERNIATION OF GRAVID UTERUS WITH ATROPHIC SKIN ULCERATION

(Two Case Reports)

by

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Weakness of the abdominal wall following caesarean section or laparotomy can develop occasionally. The hernia perhaps starts as a result of defect in primary healing and becomes apparent due to continued pressure of the abdominal contents on the badly healed scar. The factors predisposed to these hernias are—(1) inadequate haemostasis, (2) wound sepsis or inefficient repair and (3) repeated sections in the same site. Iason (1947) suggested that sepsis and careless stitching are the prime factors in the postoperative herniation. Surgical injury to the muscular branches or the lumbar nerves may also cause paralytic incisional hernias. Though any part of the intestine may be herniated, gravid uterus in advanced stage may also protrude through this rent. Cases have been described in which gravid uterus has been incarcerated in a ventral hernia (Moir and Myerscough, 1972). On rare occasions due to constant pressure of the gravid uterus, there may be formation of atrophic ulcer on the overlying skin.

Two such cases of atrophic ulcer on the skin overlying incisional hernial sac containing gravid uterus are presented.

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Case 1

Mrs. S. B., 22 years, para 3 was admitted in Eden Hospital on 15-5-78 with the complaints of ulceration on the centre of the lower abdomen for last 8 days. She was carrying term pregnancy. She stated that during this pregnancy she noticed this ulceration for the last 8 days, which did not heal with treatment by a local doctor. She also noticed this type of ulceration over the skin of her lower abdomen during her last pregnancy 1 year back, which healed up spontaneously after her last child birth vaginally.

Menstrual History: Last menstrual period—9 months ago.

Obstetrical History: First pregnancy ended in still born female baby 5 years ago. Second pregnancy was by lower segment caesarean section for prolonged labour at Gaya State Hospital. Postoperative period was uneventful. However, her lower abdomen became lax and enlarged following this caesarean section. During her third pregnancy she noticed ulceration over the skin of her lower abdomen near term, for which she did not avail any treatment. She had home delivery, vaginally at term 1 year ago with another still born female baby. During all her previous pregnancies including the present one she had no antenatal check up.

On examination, her general condition was fair, no anaemia or oedema. Blood pressure—110/70 m.m. of Hg. Systemic examination revealed no abnormality.

On abdominal examination, lower abdomen was found to be unduly protruberant. There was herniation of the gravid uterus through the incisional hernia. Although the fundus and major part of the uterus were protruding in the midline (Fig. 1) it could be reduced from hernial sac with slight difficulty. The overlying skin near the infraumbilical midline scar was full of multiple ulcers of varying sizes, 3 to 5 cm. diameter. One of these ulcers in the midline involved the whole thickness of the hernial sac and the underlying uterus could easily be visualised through it.

The exact height of the fundus was difficult to ascertain due to its inclination forward through the hiatus, but corresponded to 32 weeks; presentation was vertex, foetal heart sounds—regular. The patient was not in labour.

Investigations: Blood-Haemoglobin-11.5 gm%. Urine-no abnormality, Swab from ulcerated area showed mixed flora (mainly staphylococci).

Decision for emergency lower segment caesarean section and repair of incisional hernia after excising the ulcerated skin was taken to avoid chance of peritonitis due to its continued exposure. Right infraumbilical paramedian incision was made, 2.5 cm. away from the ulcerated margins. Lower segment caesarean section and ligation of tubes were done and a male baby of 2.7 kg. was delivered. The omentum was adherent to the hernial sac, which was separated. The hernial sac along with the ulcerated skin area was excised extending to the two ends of the incision. The hernia was repaired and skin margins were apposed with interrupted sutures. The postoperative period was uneventful except mild pyrexia on the 2nd and 3rd day and formation of stitch abscess which healed spontaneously by antiseptic dressing and systemic antibiotic treatment.

Ulcerated area of the skin was sent for histopathological examination which showed—(1) ulcerated area over the scar tissue—very thin atrophic epidermis with large amount of hyalinized collagen in the dermis, (2) ulcer over adjacent area of skin; epidermis showed proliferation and elongation of ratepegs. Dermis showed infiltration with inflammatory cells.

Case 2

Mrs. K. R., 26 years, para 1 + 0 was admitted in the Eden Hospital on 6-9-77 through Emergency with history of ulcer on the lower part of anterior abdominal wall for the last 1 month. She was carrying 38 weeks of pregnancy. She stated that she noticed gradual laxity and enlargement of lower abdomen, since 2 months. Her previous lower segment caesarean section was about 1½ years back. The swelling increased on straining. During her present pregnancy, the swelling increased with the advancement of pregnancy. Spontaneous ulcers appeared on the overlying skin of the swelling since 1 month which showed no evidence of healing inspite of treatment by a local doctor.

Menstrual History: Last menstrual period 9½ months back.

Obstetric History: In her last pregnancy, she had no antenatal check up, and it ended by a lower segment caesarean section at the Lady Duffrine Hospital, Calcutta, 1½ years ago for foetal distress. The baby died next day due to asphyxia. During her postoperative period the wound was infected and healed gradually by antiseptic dressing. Past history showed no abnormalities. On examination, her general condition was fair. anaemia and oedema—nil; systemic examination revealed no abnormality.

On abdominal examination, lower abdominal wall was unduly prominent due to large incisional hernia. Fundus and major portion of body of uterus were protruding through the hiatus which could be pushed back inside the abdomen with difficulty. There were multiple small ulcers over the skin of the abdomen, varying from 1 to 3 cm. in diameter in an area of .17.x.15. cm. around the infraumbilical midline scar (Fig. 2). The surrounding area was oedematous. The exact height of the fundus could not be ascertained but apparently it corresponded to 32 weeks pregnancy. The foetus was lying transversely Foetal heart sounds—regular. She was not in labour. Haemoglobin—11 gm. %. Urine—no abnormality detected. Swab culture of the ulcer showed mainly staphylococci.

Treatment of the ulcer was instituted by systemic antibiotics and local antiseptic dressing.

The patient went into labour on the 5th day of admission with premature rupture of the membranes and hand prolapse, when emergency lower segment caesarean section followed by repair of incisional hernia after excising the hernial sac along with the ulcerated skin was undertaken.

Histology of skin showed very thin atrophic epidermis with large area of hyalinized collagen

in the dermis and infiltrations with inflammatory cells

Discussion

Two cases of herniation of gravid uterus through incisional hernias with atrophic ulcers on the overlying skin have been presented. The incidence of incisional hernias amongst all gynaecological and obstetrical abdominal operations are 0.2 to 0.3 per cent (Dutta, 1974; Gun, 1974). Dutta also observed 2.3 per cent incisional hernias after abdominal sterilisation operations. Herniation of gravid uterus besides causing great discomfort to the patient in later weeks of pregnancy may also create trouble in parturition. Malpresentations are common specially breech and footling presentation, labour is retarded due to change in uterine axis and loss of resistance of abdominal wall (Moir and Myerscough, 1972).

The cause of the ulcer is probably due to pressure by the gravid uterus causing circulatory disturbances. Rise of plasma levels of corticosteroids associated with pregnancy (Bernharn and Grubin, 1955) probably helped by its antifibroblastic activity to grow the ulcer and its persistence. Spontaneous healing of the ulcer in the 1st case during her third pregnancy after lower segment caesarean section supported this conjecture because the corticosteroid levels start to decrease in puerperium.

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See Figs. on Art Paper II