ENDOMETRIOSIS IN LAPAROTOMY SCAR

by

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Introduction

Endometriosis in laparotomy scar was not very frequent before, but is found with increasing frequency nowadays. Eleven such cases of endometriosis in laparotomy scar have been reported here.

Case 1:

Smt. S., aged 38 years P 4 + 0 was admitted on 17-6-76 with complaints of swelling at one end of scar of previous sterilization operation. Suction evacuation with abdominal ligation of tubes was performed 3 years ago. The swelling appeared 2 years after the operation and was gradually increasing in size. It was associated with pain and tenderness of local area. There was history of increase of size of the swelling and pain with each menstrual period. On examination, there was a nodule at the lower part of vertical abdominal scar, size of about 1" diameter. It was fixed with the scar and with the deeper tissue and was extremely tender. No discolouration of the skin above the nodule was noted. On internal examination, no abnormalities were detected. Excision of the lump was performed on 22-6-76. It was found above the rectus sheath infiltrating the surrounding tissue. Rectus muscle was free. On cut section the nodule showed very small cavities filled with brown coloured blood. Histopathological report shows features of endometriosis in scar tissue. Patient attended follow-up clinic. There was no recurrence.

Case 2:

Smt. S., aged 30 years, P 4 + 1 was admitted on 16-9-76 with history of hysterotomy and ligation done 2 years ago. After 1 year of operation, a small nodule appeared on one side of the scar which was gradually increasing. On examination, a small nodule size of 1" diameter was found on one side of the transverse scar. Excision of the nodule was performed. It was absolutely above the rectus sheath and there was no difficulty to remove the nodule. Histopathological report showed endometrial tissue, glands and stroma among fibrofatty tissue.

Case 3:

Smt. D., aged 30 years, P 6 + 1 was admitted on 31-5-77 with history of hysterotomy and ligation done 3 years ago and appearance of a nodule over the scar 1 year after the operation. The lump was gradually increasing in size. On examination, there was bluish discolouration present over the nodule on the left end of the transverse lower abdominal scar. Excision was done and chocolate coloured fluid was drained during excision. The nodule was situated over the rectus sheath. The skin was found almost fixed over the nodule. Histopathological report showed structure of endometrial tissue among fibrofatty tissue.

Case 4:

Smt. R., aged 29 years, P 2 + 0 was admitted

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on 19-1-78 with the complaints of pain over the scar in lower abdomen during menstruation for last 10 months. She noticed a swelling in that area for last 6 months. Patient had ligation of tube on one side and ovariotomy on other side 7 years back. Menstrual history was absolutely normal. On examination, a right paramedian infraumbilical scar at the central part of which on left side a nodule was found size about 1½" x 1". On internal examination, no abnormality was detected. The lump was excised. It was situated over rectus sheath. The muscle below the sheath was slightly adherent with the nodule, but it could be easily separated from the muscle. The nodule was excised with part of rectus sheath. On cut section collection of old blood was noted at one part only. Histopathological report shows picture of endometriosis among fibrofatty tissue. Patient attended after 2 monhs. No abnormalities.

Case 5:

Smt. K., aged 36 years P 4 + 0 was admitted with complaints of a painful nodule over her abdominal scar which increased during menstruction. She had tubectomy done in 1974. On examination, there were 2 nodules of size about 1" diameter each, over the transverse scar. Both were ½" away from midline. On 20-2-78 excision of the nodules was done. They were situated above the rectus sheath. Part of rectus sheath was also excised along with the nodules. The histopathological examination showed endometriosis is scar tissue.

Case 6:

Smt. A., aged 27 years, P 2 + 1 was admitted on 28-2-78 with complaints of pain over ligation scar during menstruation, which lasted for 10-12 days. The patient had suction evacuation and ligation 3 years ago. Shortly after that, she started having pain over the scar area during menstruation. At the same time a nodule appeared. She was also having excessive menstrual discharge and white discharge per vaginum for last 2 months and there was bluish discolouration over the skin. Excision of the lump done which was found fixed to rectus sheath only infiltrating the surrounding part. Histopathological examination showed picture of endometriosis among fibrous tissue.

Case 7:

Smt. S., 30 years, P 6 + 0 was admitted on 18-3-78 with complaints of pain over the scar for 1 year and swelling over the area for 6 months. Patient had puerperal ligation of tube 1 year ago. There was history of definite increase in size of the nodule during menstruation. On examination almost whole of the lower abdominal scar was occupied by a nodule which was firm and tender. Excision of the nodule was done. Histopathological examination showed endometrial tissue among fibrofatty stroma.

Case 8:

Miss S., aged 16 years, unmarried, was admitted on 11-3-78 with complaints of blood discharge from a lower abdominal scar and appearance of a nodule over the scar for the last 2½ years. There was a history of appendicectomy and removal of a broad ligament cyst 2½ years ago. The nature of the cyst was not mentioned in the report. On examination, there was a nodule at the upper part of the oblique scar over the Mcberney's point. A discharging sinus was present. An attempt was made to push dye through the discharging sinus to make a sinogram but it failed. On 6-4-78 the nodule was excised under general anaesthesia. It was found situated over the external oblique aponeurosis. No infiltration was seen over the peritoneum while removing the nodule, tarry blood came out. Histopathological examination showed evidence of scar endometriosis.

Follow up: The patient attended on 10-6-78 with recurrence.

Case 9:

Smt. U., 30 years, P 3 + 1, had operation of hysterotomy + ligation of tubes done 1 year ago, and was admitted on 18-4-78 with complaints of nodule over scar for last 6 months. The nodule increased during menstruation, and was very painful during those times. On examination, 2 nodules of size 1" and ¼" in diameter respectively were found on either end of the scar. The left sided one was irregular and lobulated and bluish discolouration of the skin was present. Excision of the nodules was done on 28-4-78. They were entirely above the rectus sheath and rectus muscles were free. Histopathological report shows fibrofatty tissue

containing endometrial tissue, glands and stromal cells.

Case 10:

Smt. L., aged 37 years, P 9 + 0 was admitted in Eden Hospital on 10-6-78 with complaints of a small tender lump in the upper part of an abdominal scar. She had hysterotomy with ligation of the tubes done 5 years ago. Pain increased during menstruation. On examination, a nodule 1½" in diameter was seen at the upper point of the vertical scar. On 12-6-78 the nodule was excised. It was situated over the rectus muscle but it was easily removed from the muscle. Histopathological report showed evidenc of scar endometriosis.

Case 11:

Smt. D., aged 24 years, P 4 + 1, was admitted on 26-6-78 with complaints of pain tenderness and appearance of a small lump over the previous scar in lower abdomen. Patient had hysterotomy and ligation of tubes on 20-10-76. On examination a nodule was seen on the right end of the transverse abdominal scar ½" in diameter and tender. The lump increased during menstruation. The patient is waiting for operation-clinically it has been diagnosed as a case of scar endometriosis.

Discussion

Endometriosis in laparotomy scars occur clinically in the form of small or large tender nodules. They usually lie deep in the abdominal wall and are apt to infiltrate muscle and fascial layers. They are fixed and diffuse. They swell at each menstrual period with increased pain and tenderness and may be associated with external menstrual bleeding through skin. In the present series all the patients appeared with pain and nodule on the scar which increased in size during menstruation. External bleeding from skin was present in 1 case only (Case 8).

Endometriosis of scar has been reported after many operations including those in which the endometrium of uterus was not invaded. Curiously enough they rarely occur after caeserean section in which uterine cavity is directly opened. On the other hand they occurred in simple appendicectomy done many years previously. In the present series in all the cases patients had ligation of tubes except in 1 where appendicectomy and removal of broad ligament cyst was performed (Case 8).

In all the cases, the endometriotic nodules were found entirely above the rectus sheath, in the present series. If we try to explain the histogenesis by implantation theory then it is difficult to explain why implantation does never occur over the peritoneum or beneath the rectus muscle. Whether Halban's lymphatic theory has anything to do for the histogenesis of these cases is yet to be proved.

Recurrence of the lesion after excision has been reported which is due to incomplete excision. In the present series in 1 case the patient attended with recurrence. During operation special care has to be taken to remove the whole of nodule, so that the lesion may not reccur.

In all the cases in the present series the nodule which seemed superficially very small was found, after dissection, extending into wide base in surrounding area. The lesion was so densely adherent to rectus sheath that part of the sheath had to be sacrificed almost in all cases.

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