SCAR ENDOMETRIOSIS

by

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Endometriosis is defined as the growth of the endometrium at other sites than that lining the uterine cavity.

In 1860, Von Rokitansky first described endometriosis as a separate entity. Walker, in 1887, while corroborating Von Rokitansky's findings noted decidual reaction in the pelvic peritoneum.

Endometriosis is not limited to the female genital organs and has been reported at various other sites like intestines, appendix and abdominal scar.

Meyer was the first to describe endometriosis in the laparotomy scar in 1903. In 1942, Greenhill recorded 390 cases of scar endometriosis. He found that in these cases the operation did not necessarily involve the uterus but that scar endometriosis even followed an appendicectomy or an operation on the lower gut of a female.

A number of theories have been put forward, but none of which can explain the occurrence of endometriosis at all the various sites.

Case 1

Mrs. C. B. aged 33 years, Hindu, mother of 5 children, came in 1960 with complaint of a tender swelling on her abdominal operation scar.

She narrated the history that two years back, she underwent an abdominal operation for delivery of a premature baby for medical causes and ligation of the uterine tubes in a hospital in Calcutta.

She also stated that 10 months or a year after the operation, she started menstruating. She noticed that there was pain on the upper part of the scar tissue with the approach of the menstrual period which increased in severity with the starting of the flow and a swelling appeared. This pain and swelling increased in severity with each period and the patient became very apprehensive with the approach of each period. The area became extremely tender during the periods. After the stoppage of her period, the pain subsided, but the swelling and the tenderness though reduced, did not subside. She went to the same hospital with these complaints and according to her history she was put on to Norethynodrel. With that therapy, the pain subsided and the swelling slightly reduced but she had no menses. When she stopped the therapy, the menses reappeared along with her all previous sufferings.

On examination, a swelling, about the size of a hen's egg, situated on the upper end of right paramedial scar was found. The swelling was not freely mobile. The skin over it was blackish in colour and tender to touch. There was also an indurated area around the swelling. Per vaginam—the uterus was found normal, retroverted, mobile and the fornices were clear. General condition of the patient was fair except that she was slightly anaemic. Blood pressure was 110/70 m.m. of Hg. Pulse —80/min., regular. Lungs—normal, liver and spleen-not palpable. Blood—Hb% —10.8 Gm % (Sahli); R. B. C. 3.5

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mil/cmm.; W. B. C.—8,500/cmm.; Diff. Count—poly-72%, lympho-26%, eosino-2%. Urine—nothing abnormal detected.

Operation

Under general anaesthesia, an elliptical incision was made surrounding the indurated swelling. The indurated tissue was found to stop short at the rectus sheath. Considerable hard fibro-fatty tissue surrounding the swelling was encountered during the dissection. The entire mass was removed. Then the scalpel, scissors and forceps used were rejected and with a fresh sets of instruments, the incision was extended below and the abdomen was opened. A search was made inside the abdomen for evidence of any endometriotic infiltration in the pelvic structures, specially any uterine fistula. Nothing was detected and the abdomen was closed in layers.

Post operative period

The post operative period was uneventful. The stitches were removed on the 8th day. Menstruation occurred within 15 days of the operation. There was no pain or swelling in the scar tissue or elsewhere. She was discharged on the 20th day.

Follow up

She came after 2 months. The scar was good and there were no complaints. She was followed up for about 8 years at intervals and there was no recurrence of endometriosis in this scar.

Case 2

Mrs. L. B., aged about 33 years, mother of four children 3 living, was admitted in Howrah Nursing Home in 1961 for delivery of her 5th offspring. She had been suffering from diabetes and the foetus appeared large. There was also a previous history of foetal death (3rd one). An elective lower segment caesarean section and ligation of fallopian tubes was done. A year later, she came complaining of pain and swelling in the scar tissue for the last 6 or 7 months. She stated that this swelling and pain gradually increased in intensity at every period. She gave a history of premenstrual discomfort and hypersensitivity of the area along with pain and swelling, which as usual subsided after the menstrual period.

On examination, the swelling was oval shaped, 1½ inches in length, situated in the upper third of the midline scar. Indurated tissue encircled the blackish tender skin swelling, which was very slightly mobile. Per vaginam—the uterus was normal in size, anteverted; fornices were clear. General condition of the patient was good. B.P.—120/78 m.m. of Hg.; pulse 74/min. Lungs and heart N.A.D. Liver and Spleen normal. Blood examination revealed Hb%—90%; R.B.C. 4.8 mil/Cmm.; W.B.C. 7,500/cmm; Poly—68%, lympho—28%, eosino-4%. Routine examination of urine —Sugar-0.5%.

Operation

Under general anaesthesia, the patient was operated upon as in the first case. The mass was dissected out and the abdomen was opened. In the pelvis, there were no endometriotic nodules. So the abdomen was closed.

Post operative period

The post operative period was uneventful. The wound healed well.

Follow up

After 2 months the patient stated that she had no complaints during her menstrual period. She attended regularly for 4 years. She also had no recurrence of any previous complaints.

Case 3

Mrs. G. R., aged about 36 years, mother of 6 children, all living, had a hysterotomy performed by the author at 28 weeks for antepartum haemorrhage (placenta praevia) in 1966, in Howrah General Hospital. The fallopian tubes were also ligated during the operation. In 1968, the patient complained of a round mass in the middle of the midline scar, which she noted 3 months after the operation. She felt stretching pain and enlargement of the swelling during each menstrual period which subsided after the period, but the swelling did not subside.

On examination—A rounded swelling was visualised in the middle of the scar. The skin over the mass was adherent to

the deeper structure and was blackish in colour. The mass was very tender and its mobility restricted. Per-vaginam—Uterus-normal, in size, retroverted, mobile. Fornices-clear. General condition-fair. There was no anaemia B.P.—130/82 m.m. of Hg. Lungs and heart—N.A.D. Liver and spleen —not palpable. Blood examination report was within normal limit but with slight neutrophilic leucocytosis.

Operation

The mass was dissected out as in the previous cases, under general anaesthesia. The abdomen was opened with new sets of instruments. The pelvic structures looked normal. Then the abdomen was closed in layers.

Post operative period

The post operative period was uneventful.

Follow up

The patient came after one and half months for check up. The wound had healed well and she had no more complaints during her periods. The patient is still under observation for one year and a few months and has no recurrence of her complaint. She is menstruating regularly.

Operated Specimens

The operated specimens show areas of haemorrhages surrounded by fibro-fatty tissue under the skin, as shown in the picture Fig. I-a, b, and c respectively of cases 1, 2 and 3. The histological sections show typical endometrial glands embedded in the fusiform fibrous tissue beneath the epithelial layer of the skin. See Fig. II-a, b, and c respectively of cases 1, 2 and 3.

Conclusion

Scar endometriosis is very rare. The real cause of this condition is not yet established. But if we believe in the implantation theory of Sampson, extra precautions should be taken in protecting the skin and fatty tissue before opening the parietal peritoneum in all abdominal operations dealing with the uterus and its adnexae. When opening a gravid uterus or in operations dealing with pelvic endometriosis, we should discard the abdominal mops, knife, and scissors, replacing them with fresh ones when necessary, and thorough cleaning of the pelvic cavity before closing the abdominal peritoneum should be done.

In the operative treatment of all scar endometriosis, the abdomen must be opened and the pelvic cavity and the uterus inspected, before completing the operation.

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References

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3. Sampson: Arch. Surgery. 3: 245, 1921.

See Figs. on Art Paper VII