CASE REPORT

Port site endometrioma: a rare cause of abdominal wall pain following laparoscopic surgery

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SUMMARY

Endometriomas are a rare cause of abdominal wall pain. We report a case of a port site endometrioma presenting with an umbilical swelling. The patient underwent a laparoscopy for pelvic endometriosis 6 months previously and presented with a swelling around her umbilical port site scar associated with cyclical pain during menses. Ultrasound scan reported a well-defined lesion in the umbilicus and MRI scanning excluded other pathology. As she was symptomatic, she underwent an exploration of the scar and excision of the endometrioma with resolution of her symptoms. Precautions should be taken to reduce the risk of endometrial seeding during laparoscopic surgery. All tissues should be removed in an appropriate retrieval bag and the pneumoperitoneum should be deflated completely before removing ports to reduce the chimney effect of tissue being forced through the port site. The diagnosis should be considered in all women of reproductive age presenting with a painful port site scar.

BACKGROUND

Abdominal wall endometriomas are often misdiagnosed and CT scan and MRI are not always diagnostic. Port site endometriomas are extremely rare.[1] Patients may present with cyclical pain and/or a subcutaneous swelling under a port site scar. A history of endometriosis may be helpful in the diagnosis.

Treatment is by complete excision and leads to cure in 95% of cases.[2] All precautions should be taken to avoid implantation of endometrial tissue during laparoscopic surgery. Simple precautions during surgery may reduce the risk.

CASE PRESENTATION

A 37-year-old woman was referred by her gynaecologist for a second opinion regarding pain and swelling around her umbilical port site scar. In her medical history, she had undergone a laparoscopy for pelvic endometriosis 6 months previously. Two months postoperatively, she developed cyclical umbilical pain associated with a port site swelling.

Ultrasound scan diagnosed a soft tissue swelling behind the umbilicus measuring 10 mmx18 mm in size and raised the possibility of an incisional hernia. Examination revealed a firm swelling in proximity to the umbilical scar. An MRI scan was ordered and suggested the possibility of an incisional hernia. As she was quite symptomatic, an exploration of the scar was offered. During surgery, she was found to have a 15 mm nodule under the scar; no incisional hernia was present. The nodule was excised and the defect repaired.

Histology confirmed the endometrioma. Postoperatively, she developed a superficial wound infection that settled with conservative treatment resulting in the resolution of her symptoms.

DIFFERENTIAL DIAGNOSIS

Incisional hernia, endometrioma, malignant metastatic deposit, infection, chronic granulation tissue, lipoma, soft tissue sarcoma.

TREATMENT

For extrapelvic endometriosis, medical therapies have been shown to be ineffective. Surgical excision remains the treatment of choice and is curative in the majority of cases.

OUTCOME AND FOLLOW-UP

The patient made an uneventful postoperative recovery. Histology confirmed the excised tissue to be an endometrioma. On postoperative follow-up in clinic, all her symptoms had resolved.

DISCUSSION

Endometriosis is defined as the presence of functioning endometrial glands and stroma outside of the usual lining of the uterine cavity. An endometrioma is an endometriotic cyst. In the presence of an abdominal surgical scar, endometriosis is referred to as an abdominal wall endometrioma or surgical scar endometrioma. Endometriomas are a rare cause of abdominal wall pain and can present many months postsurgery and have been reported in a variety of different scars. Initial diagnosis can be difficult and they can be misdiagnosed as hernias, granulation tissue, metastatic deposits, desmoid tumours and lipomas.[3–7]

A good history of cyclical pain with menses should be helpful in the diagnosis. MRI scanning may be diagnostic and may help in excluding other pathologies.[7]

Laparoscopy is a common diagnostic or therapeutic procedure for abdominal conditions. Port site metastatic deposits and even chronic infections like tuberculosis have been documented following laparoscopic surgery.[8 9]

To our knowledge, only 15 cases of port site endometriomas have been reported in the English literature.[1] There is little in the literature about the mechanism of post site deposits and we recommend

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that all tissues removed should be placed in an appropriate retrieval bag. Also, time should be spent to ensure that the pneumoperitoneum is deflated before removal of the ports to reduce the risk of the 'chimney effect' that forces carbon dioxide through the port sites if the insufflating gas is not fully deflated prior to port removal.[8]

In summary, endometriomas are a rare cause of abdominal wall pain and are often misdiagnosed.[2] The diagnosis should be considered in a woman of reproductive age presenting with a painful trocar port site scar.

Learning points

- Endometriomas are a rare cause of abdominal wall pain and are often misdiagnosed.
- The diagnosis should be considered in a woman of reproductive age presenting with a painful trocar port site scar.
- A history of cyclical pain with menses is helpful. MRI scan and ultrasound scan may be helpful in the diagnosis and in excluding other pathology.
- Excision with repair of the defect is curative in up to 95% of patients.
- All tissues removed during laparoscopy should be placed in an appropriate retrieval bag. Also, time should be spent to ensure that the pneumoperitoneum is fully deflated before removal of the ports.

Contributors ZS wrote the case report from the notes and discussed the case with MS. He also submitted the paper and helped with proof-reading. FH proof read the case report and wrote the background and summary. ZS did the literature review and, with FH, wrote the discussion. MS is the senior author who proof-read the paper and gave guidance.

Competing interests None declared.

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