Endometriosis: a possible cause of right shoulder pain

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Summary

Although endometriosis is a common condition it can present with a wide range of symptoms. We report a case of chronic right hypochondrial and shoulder pain which proved to be due to endometriosis.

Key words: Endometriosis; Sites; Presentation.

Introduction

Endometriosis is a common condition affecting 5-10% of the general female population (ACOG 2005). The disease is mostly found in the pelvic organs and peritoneum and presents with pelvic pain, dysmenorrhoea and/or dyspareunia. We report a rare case of extrapelvic endometriosis that presented with pain in the right hypochondrium and right shoulder.

Case Report

A 38-year-old woman was referred to the Gynaecology Clinic because of a history of secondary infertility. She had had only one pregnancy 13 years before which ended with an emergency caesarean section at 34 weeks gestation due to placental abruption. The patient had her menarche at the age of 13. Her periods were regular, always associated with dysmenorrhoea and they seemed to be getting heavier. She used the combined birth control pills for nine years following the delivery of her child and stopped using any form of contraception after that as she was trying to conceive.

There was no previous history of any medical or surgical problem. However, 18 months before her referral she began to have attacks of right shoulder and right hypochondrial pain. She was referred for medical and surgical review but the cause of the pain was never identified. On close questioning the pain was more or less of a constant dull aching nature with frequent acute exacerbations one to two days before her period. The right hypochondrial acute pain episodes used to last for the whole duration of the period while the right shoulder pain tended to get better on the second or third day. Although the patient was doing her best to live with the pain, she was barely coping and the pain started to have an impact on her life. She was also worried about the possible effect of any fertility treatment or future pregnancy on her pain.

General and abdominal examinations were unremarkable, whereas pelvic examination showed a bulky, mobile and tender uterus with no masses felt in either adnexa. The patient had had an abdominal and pelvic ultrasound scans six months before as part of the investigations for the pain but they did not reveal any abnormality.

Initial investigations for infertility were already arranged by the general practitioner before referral and they were all normal including the semen analysis of her partner. The results of the tests were explained to the couple, and we discussed the possibility of having diagnostic laparoscopy and a tubal patency test with the patient. We also mentioned that laparoscopy might help in finding the cause of her upper abdominal pain.

Laparoscopy showed deposits of endometriosis in the pouch of Douglas, right uterosacral ligament and right ovary. Both tubes were patent and there were no pelvic adhesions. Evidence of what seemed to be extensive endometriosis was found on the peritoneum covering the under surface of the diaphragm above the liver; no other areas were affected in the abdomen. Biopsies were taken from these peritoneal lesions which later confirmed the presence of endometriosis. The operative findings and management options were discussed with the patient. Although she was initially referred with a fertility problem she decided to have a course of GnRH analogues with add-back therapy for six months to treat her pain before considering any fertility management. She was reviewed in the clinic halfway through her course and reported a marked improvement in her symptoms with the disappearance of the right shoulder pain.

Discussion

Endometriosis can be simply defined as the presence of abnormally implanted endometrial tissue (glands and stroma) outside the uterine cavity [1]. The best estimated incidence of the condition in the general female population is between 5-10% [2]. The incidence has been shown to reach up to 30% in women being evaluated for infertility and 45% in those investigated for chronic pelvic pain [2]. The most affected sites are the pelvic organs and peritoneum, although extra pelvic sites were reported, e.g., bowel, umbilicus and lungs [3]. The extent of the disease varies from a few small spots with an otherwise normal pelvis to an extensive form with fibrosis, adhesions, distortion of anatomy with or without the formation of ovarian endometriotic cysts [4].

In this case the patient did not have any significant pelvic symptoms of endometriosis although the subfertil-

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ity could have been related to the condition. The only suggestive symptoms of endometriosis, after taking a detailed history, were due to abdominal rather than pelvic involvement in the form of upper right quadrant pain referred to the right shoulder which also had a relation to the period.

The diagnosis was confirmed histologically and the condition showed marked improvement following treatment with GnRH analogues which proves that endometriosis was the underlying cause. There was a previous case report of juxtahepatic endometriosis [5] which presented only with right hypochondrial pain. Thus endometriosis can be regarded as one of the possible causes of right shoulder and right hypochondrial pain in females after exclusion of other medical and surgical causes, particularly if the history is suggestive.

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