Gallstones spilt at laparoscopic cholecystectomy: a new cause of intraperitoneal granulomas

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Abstract
A case of a 32 year old woman with a foreign body-type granulomatous reaction to gallstones spilt at previous laparoscopic cholecystectomy is reported. The patient presented with hard nodules within the omentum at a subsequent Caesarean section, raising the possibility of metastatic tumour. Histological examination showed gallstones with an associated foreign body-type granulomatous reaction. With increasingly widespread use of laparoscopic surgery and relatively common spillage of gallstones at surgery, it is likely that histopathologists will encounter this condition more frequently in the future, both in surgical biopsy specimens and at necropsy.

Discussion
Laparoscopic cholecystectomy is probably the most significant major surgical advance in the past decade. After its introduction in the late 1980s, its use has become increasingly widespread, to such an extent that laparoscopic cholecystectomy has now been established as the treatment of choice for symptomatic gallstones, being preferred to the traditional open cholecystectomy. A major analysis of the complications of laparoscopic cholecystectomy in 77 604 cases showed that significant complications occurred in only about 2% of cases and that the main problem was bile duct injury (0-6% of cases), with vascular injury and damage to the bowel or stomach accounting for most of the other significant postoperative morbidity. However, subsequent problems are more frequent. The main reported sequelae involve sepsis, although more exotic complications such as cholelithiopysis have been reported. The case discussed here demonstrates that spilt gallstones may also mimic tumour deposits clinically and therefore come to the attention of histopathologists. Not surprisingly, gallstones elicit a granulomatous response seen histologically. There are many causes of intra-
Ulcerating rheumatoid nodule of the vulva

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Abstract

A case of an ulcerating rheumatoid nodule of the vulva in a 76 year old woman with rheumatoid arthritis complicated by Felty's syndrome is reported. The patient presented with a mass in the vulval region. On clinical examination, she had an ulcerated mass associated with inguinal lymphadenopathy. These findings resulted in a clinical diagnosis of invasive carcinoma of the vulva and an excision biopsy was carried out. On microscopic examination, the lesion showed the characteristic features of a rheumatoid nodule with ulceration of overlying epidermis. Adjacent vessels showed inflammation and fibrinoid necrosis of their walls suggestive of a vasculitis. Awareness of the possibility of ulceration in rheumatoid nodules may facilitate diagnosis and avert unduly aggressive treatment.

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Rheumatoid nodules occur in approximately 25% of patients with rheumatoid arthritis. They are usually found in subcutaneous tissue near a joint, but may also occur at other sites, including the heart, lung, gastrointestinal tract, and synovial membrane.1 Histologically, they are characterised by central fibrinoid necrosis surrounded by palisading histiocytes.

Here, we report a case of a rheumatoid nodule in the vulva of a woman with seropositive rheumatoid arthritis and Felty's syndrome. To our knowledge, this is the first report in the literature of a rheumatoid nodule at this site. Additional unusual features in this case included ulceration of the overlying skin and associated lymphadenopathy, resulting in clinical mimicry of carcinoma.

Case report

A 76 year old woman with a 40 year history of rheumatoid arthritis complicated by Felty's syndrome presented with a painful swelling on the vulva. The initial clinical suspicion was of infection and antibiotic therapy was instituted. There was no resolution and over the course of the next three months the lesion enlarged. Physical examination showed a left labial mass measuring 3 × 4 cm with a 1.5 cm overlying ulcer with a raised rolled edge. There was induration of surrounding tissues and inguinal lymphadenopathy was present. The clinical diagnosis at this stage was one of invasive carcinoma and an excision biopsy of the mass was carried out.

Apart from Felty's syndrome (rheumatoid arthritis associated with splenomegaly, lymphadenopathy and neutropenia), there was no past medical history of note. No rheumatoid nodules were noted on extensor surfaces. There was no history of previous gynaecological neoplasm or surgery. There was no history of diabetes mellitus. The patient was taking 7.5 mg of prednisolone daily.

PATHOLOGY

Macroscopic features

The resection specimen consisted of an oval of hair bearing skin measuring 4.3 × 3.0 cm with

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peritoneal granulomas including infections (tuberculosis, fungal infections and parasitic infestations), foreign material (starch, douche fluid, lubricants, fibres from surgical material, escaped bowel contents, leaked bile, ruptured ovarian cysts, and so on), and conditions such as Crohn's disease, sarcoidosis and Whipple's disease.1 However, as far as we are aware, a granulomatous response to escaped gallstones has not been reported, partly because gallstone spillage during traditional open cholecystectomy is uncommon and, if it does occur, retrieval of stones is relatively straightforward. With the widespread use of laparoscopic cholecystectomy nowadays, foreign body granulomas due to gallstones are likely to present, albeit incidentally, to pathologists more frequently, either as surgical biopsy material or at necropsy. Thus one more cause of intraperitoneal granulomas needs to be added to the traditional list.

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