Extragenital adenomatoid tumour of the omentum: an unusual location

E Skafida*, A Tsavari1, K Koulia1, D Myoteri1, X Grammatoglou1, A Zisi2, M Varras3, T Vasilakaki1

Abstract

Introduction
Adenomatoid tumours are benign neoplasms that are mesothelial in origin and are usually confined to the genital tract and have rarely been reported at other sites such as the omentum, pleura, heart, liver, adrenal gland, retroperitoneum and intestinal mesentery. This paper discusses the unusual location of an extragenital adenomatoid tumour of the omentum.

Case report
We report the case of a 32-year-old woman who presented to our hospital with a four-day history of fever and pain in the right iliac fossa. Ultrasonography revealed a right ovarian cyst which was 2.5 cm in diameter and fluid in douglaseio. A right partial oophorectomy was performed, and during the operation, a well-circumscribed mass measuring 2 cm was observed in the omentum. Histological evaluation of the cyst showed features of a cracked luteal cyst. On microscopic examination, the mass had a vari-ous structure of adenomatoid tumour. In the immunohistochemical study, the lesional cells were positive for the tumour markers CEA, Ca19-9, Ca125, HMBE1, CKAE1, CKAE3 and calponin. The treatment in such cases is tumour excision. We report the case of an unusual extragenital adenomatoid tumour.

Conclusion
Adenomatoid tumours are often found incidentally during surgical procedures. Tumour excision is therefore the treatment of choice.

Case report
We report the case of a 32-year-old woman who presented to our hospital with a four-day history of fever and pain in the right iliac fossa. Ultrasonography revealed a right ovarian cyst which was 2.5 cm in diameter and fluid in douglaseio. A right partial oophorectomy was performed, and during the operation, a well-circumscribed mass measuring 2 cm was observed in the omentum. Histological evaluation of the cyst showed features of a cracked luteal cyst. On microscopic examination, the mass had a vari-ous structure of adenomatoid tumour. In the immunohistochemical study, the lesional cells were positive for the tumour markers CEA, Ca19-9, Ca125, HMBE1, CKAE1, CKAE3 and calponin. The treatment in such cases is tumour excision. We report the case of an unusual extragenital adenomatoid tumour.

Discussion
The mesothelial origin of adenomatoid tumours is widely accepted and is supported by electron microscopy and immunohistochemical studies. However, multiple histogenetic origins have been proposed for these tumours by different authors, including mesothelial, mesonephric, Müllerian and endothelial origins. The reason for an apparent predominance of these tumours in the genital

Licensee OA Publishing London 2013. Creative Commons Attribution Licence (CC-BY)

Figure 1: Microscopically, the cells of the tumour have a vacuolated cytoplasm and a signet-ring or lipoblast-like cell morphology; the stroma consists of loose or dense collagen tissue with hyalinisation. Marked cytologic atypia, tumour cell necrosis or mitotic figures, are not present. Figure 1(A): haematoxylin and eosin × 100. Figure 1(B): haematoxylin and eosin × 400.

Case Report

Adenomatoid tumours have a distinct but variable structural pattern ranging from irregularly arranged, dilated tubular channel, cysts and gland-like spaces lined by flattened or cuboidal cells to solid nests. Many cells have vacuolated cytoplasm and a signet-ring or lipoblast-like cell morphology. Stroma may consist of loose or dense collagen tissue with hyalisation and may contain aggregates of lymphocytes. A variety of immunohistochemical markers have been reported to identify adenomatoid tumours such as calretinin, CKS/6, D240, caldesmon, CKA1, CKA3, caplonin, HMBE1 and WT1. Calretinin is a calcium binding protein that is located both in the cytoplasm as well as the cell nucleus and has a high sensitivity for identifying mesothelial cells. Adenomatoid tumours do not express the vascular markers CD31, CD34 and factor VIII. These tumours are usually solitary and patients are commonly asymptomatic. The tumours are often found incidentally during radiological examination or surgical procedures. Tumour excision is therefore the treatment of choice.

Conclusion

Adenomatoid tumours are often found incidentally during surgical procedures. Tumour excision is therefore the treatment of choice.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

References


Licensee OA Publishing London 2013. Creative Commons Attribution License (CC-BY)

Compeing interests: none declared. Conflict of Interests: none declared.

All authors contributed to the conception, design, production of the manuscript, as well as read and approved the final manuscript. All authors abide by the Association for Medical Ethics (AME) ethical rules of disclosure.


Licensee OA Publishing London 2013. Creative Commons Attribution Licence (CC-BY)