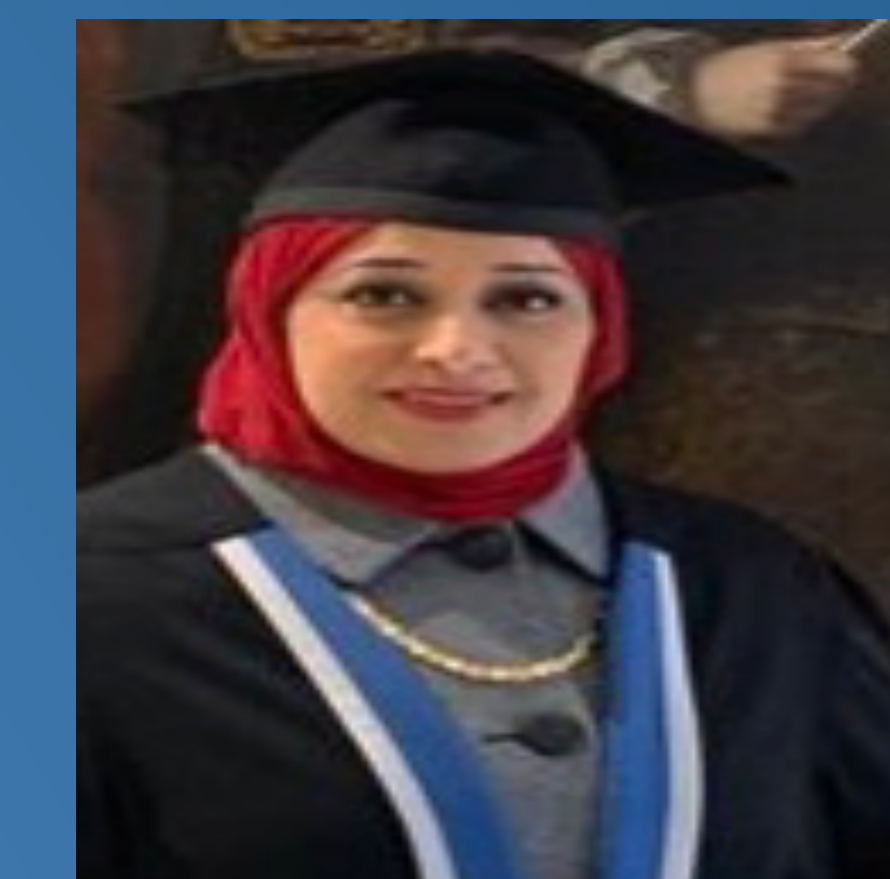


case report: Sebaceous carcinoma arising within ovarian dermoid cyst

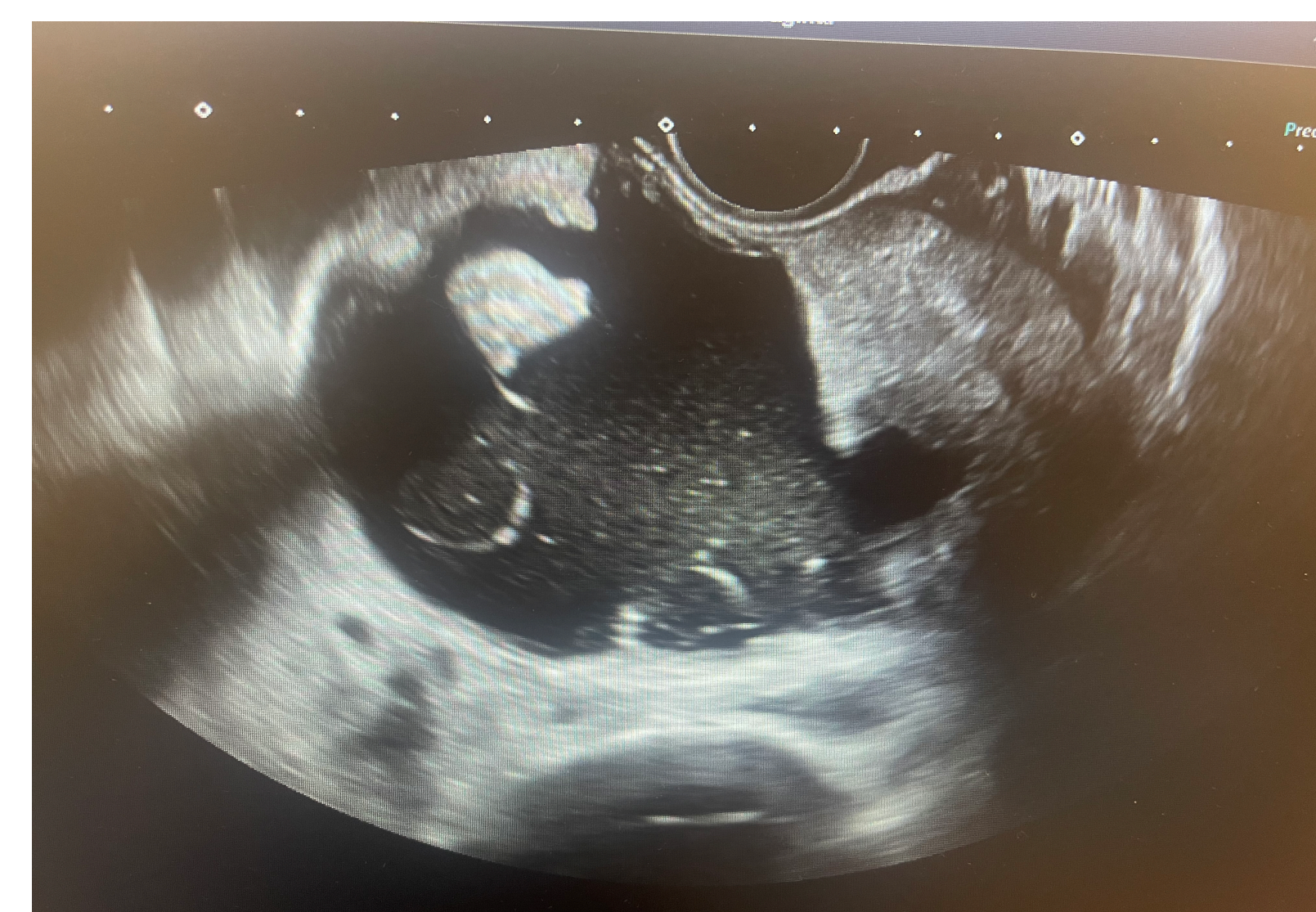
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Abstract

This case report discusses a rare find of a sebaceous carcinoma arising within an ovarian dermoid cyst in a 49-year-old patient. There have been 10 reported cases worldwide as of August 2018. This report details not only the case itself but the subsequent discovery of a previously unknown hereditary condition in the patient in question.

Case presentation



A 49-year-old female presented to her GP complaining of a feeling of fullness in the right pelvis ongoing for several months. On examination, she was found to have a palpable fullness in the pelvis and had a Ca-125 of 28. It was also noted that there was a family history of ovarian, breast, and bowel cancer, thus pelvic ultrasound was arranged. The ultrasound showed a left adnexal cyst measuring 11.1*11.5cm described as thick-walled and containing mural nodules and low-level echoes. The patient was referred to a red flag gynecology clinic.

Discussion

The patient was seen at the clinic one week later and further investigations were sought including a CT of the chest, abdomen, and pelvis. CT showed a left adnexal mass of mixed contents with no evidence of metastatic disease. The mass measured 11*10*11cm in size and was found to contain soft tissue, cystic, calcified, and fat density components. The case was discussed at MDM and a total laparoscopic hysterectomy, bilateral salpingo-oophorectomy, and omentectomy was done. A ruptured capsule was noted on histopathological examination leading to a query over spillage of tumor contents.

The initial pathologist's report commented that the sampled tissue consisted of almost entirely of a sebaceous carcinoma with a focus of normal thyroid tissue and fat necrosis. A diagnosis of sebaceous carcinoma arising within a background of a teratoma was reached with a provisional FIGO stage of 1C applied at that time. The patient was referred to medical oncology. Due to the rarity of this tumor, it was not recommended by the oncology team for any adjuvant therapy due to uncertain benefit. Follow-up CT scans were suggested every 3 months for the 1st year.

Furthermore, the tumor cells showed loss of normal nuclear staining pattern for the mismatch repair proteins MSH2 and MSH6. The involvement of the mismatch repair pathway to carcinogenesis in such a young patient along with a strong family history was highly suggestive of Lynch syndrome (HNPCC).

Conclusion

- Dermoid cysts are usually benign in nature
- malignant transformation of these cysts occurs in less than 2% and is often a squamous cell carcinoma derived from squamous epithelium
- While most cases of Sebaceous carcinomas are idiopathic, there is a significant association with Muir-Torre syndrome
- History taking is a vital part of patient assessment, including detailed family history
- In this case it led to the discovery of a previously unknown inherited condition
- Always consider early referral for genetic testing in those with a strong family history of cancer