Case 15618

Eurorad ••

A synchronous, non-hereditary case of colorectal and ovarian

cancer

Published on 28.03.2018

DOI: 10.1594/EURORAD/CASE.15618 ISSN: 1563-4086 Section: Genital (female) imaging Area of Interest: Genital / Reproductive system female Procedure: Diagnostic procedure Imaging Technique: MR Imaging Technique: MR-Diffusion/Perfusion Special Focus: Fistula Case Type: Clinical Cases Authors: Duarte Rosa, Cláudia Campos Patient: 77 years, female

Clinical History:

The patient was referred to our institution complaining of vaginal bleeding for 6 months. There was also a history of weight loss (10 kg in one year).

At examination there were faeces in the vagina, with direct evidence of a recto-vaginal fistula.

Magnetic resonance imaging was performed.

Imaging Findings:

At magnetic resonance imaging, no uterine or cervical anomalies were detected. There was a tumour in the anterior rectal wall, with a fistulous tract to the middle third of the posterior wall of the vagina, with 2 cm in size. When the rest of the pelvic cavity was studied, a mixed cystic and solid lesion in the left ovary was identified. This lesion was adherent to the sigmoid colon wall, and it showed progressively high b values, with a drop of signal in the ADC map sequences, compatible with restricted diffusion. There was diffuse oedema of the pelvic fat, but no other lesions were found, and no enlarged lymph nodes were noted in the pelvic cavity. **Discussion:**

Background:

Colorectal and ovarian cancer association is more common in hereditary syndromes such as the Lynch syndrome. [1] In these cases, the disease clinically manifests at a younger age, without predisposing risk factors other than gastrointestinal polyps. [2]

Sporadic cases of two or more simultaneous neoplasms can occur at any age. In elderly patients, with coexistent risk factors, this association is more probable. [3] Thus, effective screening and diagnostic tool must be put to work, in order to correctly identify these situations.

Clinical perspective:

When simultaneous neoplasms are suspected, adequate imaging protocols must be put to practice, and the radiologist must be informed about this possibility. [2] This way, awareness will be raised for the possibility of more than one neoplasm. These patients need to be adequately staged in order to tailor the most effective personalised therapy. Either adjuvant or neo-adjuvant chemo/radiation therapy can be of use if surgery is being considered in these neoplasms with multiple organ involvement. [1]

Imaging perspective:

Most commonly, ovarian lesions in non-hereditary colorectal cancer are secondary (metastases). [1] Metastases can

sometimes be differentiated from primary ovarian cancer when a mixed/cystic component is seen. [2, 3] In this case, a mixed cystic and solid lesion was found, with restricted diffusion in the solid component. A primary ovarian cancer was more probable, though colorectal metastases could not be ruled out until pathological studies on the surgical specimen were performed.

Outcome:

The patient underwent pelvic exenteration surgery, followed by radiation therapy. Adjuvant chemotherapy with carboplatine was initiated, given that no distant metastases were found.

Teaching Points:

Sporadic synchronous neoplasms can occur at any age. It is of extreme importance to optimise imaging protocols in order to accurately diagnose any further lesions found during known tumour staging. **Differential Diagnosis List:** Rectal adenocarcinoma with vaginal fistula and synchronous ovary serous cystadenocarcinoma, Ovarian metastasis, Endometrioma

Final Diagnosis: Rectal adenocarcinoma with vaginal fistula and synchronous ovary serous cystadenocarcinoma

References:

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Description: Sagittal T2WI showing a fistulous tract between the rectum and vagina. At pathology, rectal adenocarcinoma was proven. **Origin:** Cunha, TM. Department of Radiology, IPOLFG



Description: Axial T2WI showing a fistulous tract between the rectum and vagina. At pathology, rectal adenocarcinoma was proven. **Origin:** Cunha, TM, Radiology department, IPOLFG



Description: Sagittal T2WI showing mixed cystic and solid lesion of the left ovary. Pathology showed an ovarian serous cystadenocarcinoma. **Origin:** Cunha, TM, Radiology department, IPOLFG



Description: High b value (1000) sequence shows restriced diffusion in the solid component of the mixed left ovarian lesion. Pathology showed an ovarian serous cystadenocarcinoma. **Origin:** Cunha, TM, Radiology Department, IPOLFG



Description: ADC map sequence shows restriced diffusion in the solid component of the mixed left ovarian lesion. Pathology showed an ovarian serous cystadenocarcinoma. **Origin:** Cunha, TM, Radiology Department, IPOLFG