

Identification and extirpation of local recurrences of gynecological cancer using ROLL technique

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We present 3 cases of gynecological cancer recurrences in which the ROLL technique has been used for its detection and extirpation.

Technique:

Intralesional injection of the CT-guided radiotracer on the day prior to surgery by administering 5 mCi of Tc99m-Macroaggregated albumin (MAA) in a volume of 0.2 ml, using a 25 G spinal needle. Scintigraphic imaging is performed immediately with SPECT-CT to confirm the correct intralesional injection. In the surgical act, a gamma wireless laparoscopic probe is used to locate the lesions.

Results:

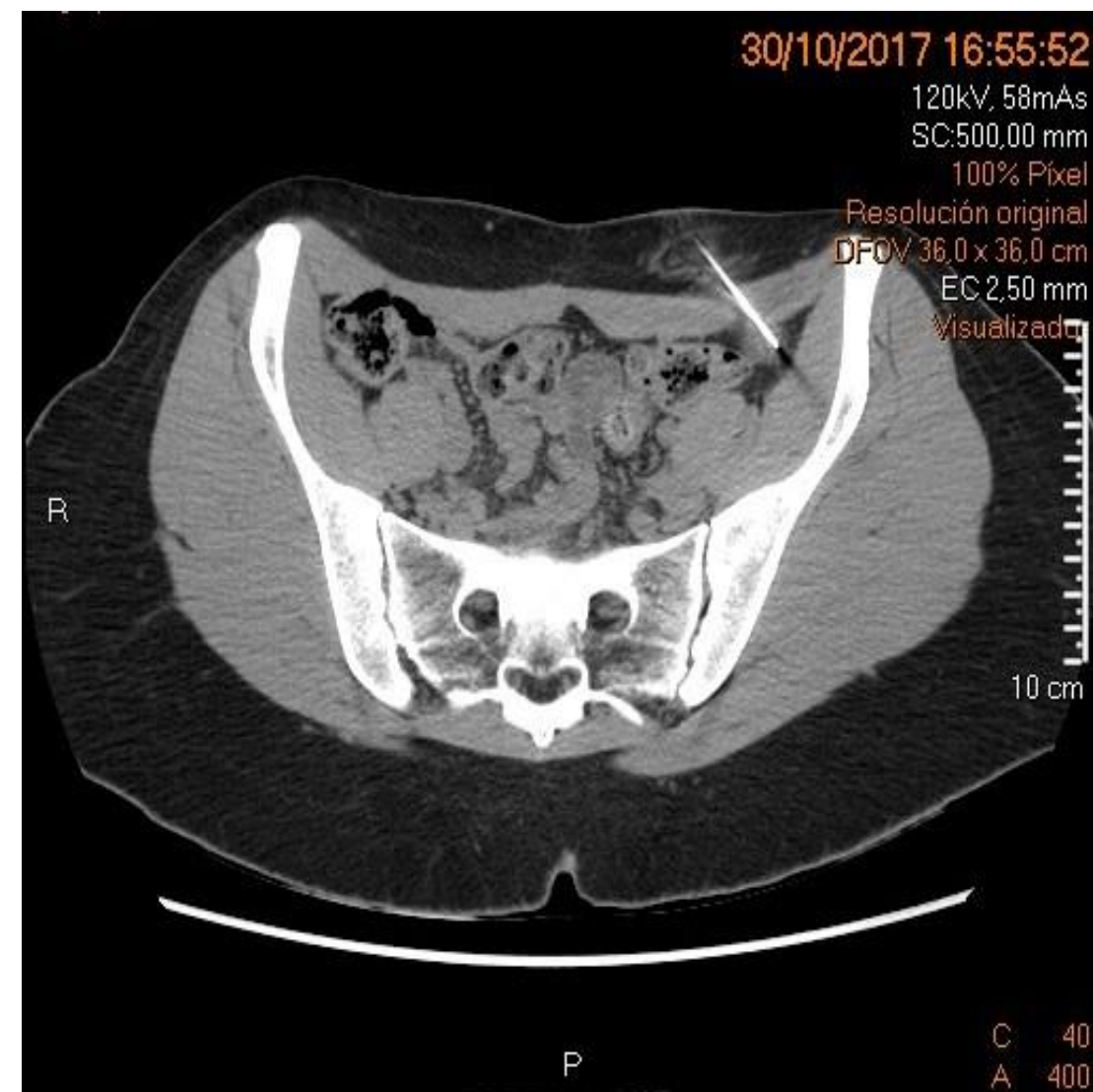
1. 25-year-old patient, diagnosed with a low-grade breast angiosarcoma treated in 2013 with simple mastectomy and adjuvant chemoradiotherapy. After 2 years free of disease, local tumor recurrence is treated with tumor excision and reirradiation. In 2017, 2 suspicious lesions were observed in MRI at the level of the right subcostal wall and in the left hemipelvis. The decision was to remove both lesions with ROLL. The pathological anatomy confirmed the metastases of low grade angiosarcoma.
2. 58-year-old (2013) patient who underwent primary cytoreduction and adjuvant chemotherapy due to bilateral borderline serous carcinoma. In 2018, during a control MRI, 2 malignancy suspicious implants were visualized at the paraortic level and at the posterior cul-de-sac. They were excised with the ROLL technique.
3. 46-year-old woman diagnosed with high-grade papillary serous ovarian cancer in stage IIIC in May 2015. She was treated with optimal primary cytoreduction and adjuvant chemotherapy with complete response. In September 2018, during the control MRI an implant was identified in the right iliac fossa in close contact with the external iliac vessels. It's size was 11x16x15mm and it was compatible with recurrence and inguinal node of 9mm suspect. The decision was to perform PET CT for radioguided surgery with ROLL technique.

In all cases, the implants were successfully removed by laparoscopy with surgical time, morbidity and length of hospital stay reductions.

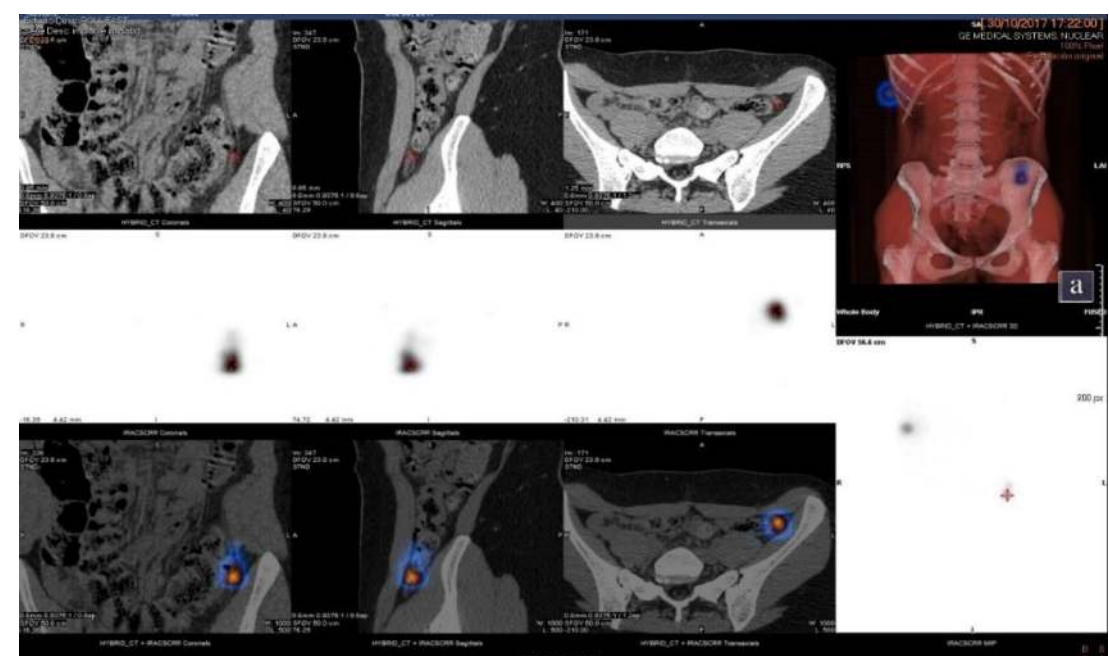
Conclusions

This technique, already used successfully in other specialties and in breast cancer, is increasingly used in oncological gynecology. It allows accurately removing implants that, due to size and location would be difficult to remove otherwise. It further allows selecting the tissue to be removed and doing it in a shorter surgical time.

Intralesional injection of the radiotracer guided by CT (case 1)



Scintigraphic images with SPECT-CT to confirm the correct intralesional injection (case 1).



3D reconstruction of left hemipelvic lesion (case 1)

