

any of the papers consulted. In our study, we used intravenous dexamethasone for one week at the doses mentioned above. Subsequently, as symptoms remitted, we changed to a descending dexamethasone regimen until the third week.

Treatment of cauda equina syndrome must be surgical, but its clinical result is not directly linked to the time elapsed between diagnosis and surgery. Differences in the SF-36 questionnaire, the ODI and the Low Back Outcome Score between operated and nonoperated patients were found only after 2 years from presentation⁵. The patient's favorable clinical evolution on initial corticoid administration made it possible to defer surgery and continue with the same treatment regimen.

The patient's satisfactory clinical evolution cannot be attributed solely to corticoid therapy since there are no explicit references in the literature to this matter. According to Domenicucci⁴, this favorable evolution could be due to the CSF "clearance effect"; indeed, as a result of the blood being in contact with the CSF, the former resorbs before coagulation. Another factor to be considered is the volume of bleeding, on which we have found no references in the literature. The current images of wall-formation and deformity shown on MRI (fig. 2) have not resulted in any symptoms.

The case presented herein shows the possibility of meningeal syndrome and cauda equina syndrome to occur simultaneously following surgery for lumbar disc herniation, as a result of a combined injury to the peri-radicular vessels and the dural sac in the course of lumbar discectomy. In certain circumstances, patients may recover from this complication with medical treatment, without the need of surgery to drain the hematoma.

Conflict of interests

The authors have declared that they have no conflict of interests.

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Cystic metastasis of squamous cell carcinoma of the cervix to the gluteal region. A case report

Metástasis quística de carcinoma escamoso de cérvix en la región glútea. A propósito de un caso

Sr, director:

Soft tissues comprise approximately 55% of body mass, but blood metastases in them are rare¹. This low incidence may be attributed to several factors, such as pH changes, metabolite accumulation and local temperature in soft tissue areas¹.

In this study, we present a case of metastasis of a cervical carcinoma that is extremely unusual both because the cystic structure it acquired and because its location in the gluteal region.

The patient is a 64-year-old female who developed a large-scale neoplasm in the posterolateral region of her right gluteus with no evidence of pain or other local or systemic symptoms.

The patient had a history of thrombocytopenia with concomitant splenomegalia, diagnosed in February 2006. In

March 2004 she had been diagnosed with a squamous cell carcinoma of the cervix, graded at stage IIB following the classification of the International Federation of Gynecologic Oncologists (FIGO); with a local extension to the bottom of the pelvic girdle and the vagina. Treatment consisted in brachytherapy and external radiation, which succeeded in providing local control of the disease.

One year later she developed bone metastasis to the metaphyseal area of the left proximal humerus, which was treated with prophylactic Hackett-type nailing and cementing of the osteolytic site, in addition to external radiation therapy of the affected area and chemotherapy. All this means that at the time of presentation the patient had a diagnosis of stage IV squamous cell carcinoma with a history of more than 3 years.

The patient was referred to the Musculoskeletal Oncology Department of our hospital by the Medical Oncology Department in May 2007 because she presented with a 15 × 15 × 10 cm neoplasm in the posterolateral region of her right gluteus. Several ultrasound studies had been performed previously which seemed to reveal the presence of an encapsulated hematoma. An echo-doppler was performed, which showed a vascular tangle surrounding a cystic cavity.

The case was followed up by the Medical Oncology Unit for 6 months, during which a slow but relentless growth of the neoplasm was observed. However, its etiology could not

be ascertained. At the same time, an increase in tumor marker CA 15.3 was recorded. When the patient presented to us for the first time, her physical examination showed a tense fluctuating neoplasm, which several punctures performed during the 6-months follow-up period had shown to contain serohematic fluid collections. Pathologic and bacteriologic studies of these collections were systematically negative (fig. 1).

The mass was firmly attached to the plane of the superficial fascia lata-aponeurosis of the gluteus maximus and the subcutaneous cell tissue on the right side. It was interesting to see lateral circulation on the skin surface and the absence of inflammatory signs. A computerized tomography (CT) was performed in November 2006 and the radiologic diagnosis was compatible with a seroma or fluid collection of undetermined etiology, located outside the pelvis, on the right gluteal muscle mass (fig. 2).

A magnetic resonance (MR) study was carried out that revealed the neoplasm, with its serohematic fluid collections and bone metastases into the right iliac wing. A bone scan was requested in order to determine the extent of the bone metastases, which showed injuries to the ribs, the spine and the pelvis. Laboratory results, except for CA 15.3 marker elevation and thrombocytopenia, were within normal values; tests for HIV were negative. The last puncture gave a positive pathological diagnosis for the fluid, compatible with squamous cell carcinoma. Treatment with chemotherapy, surgery and radiation therapy was indicated.

In January 2008, once chemotherapy was completed, the neoplasm was excised; its size was 17 × 11 × 14 cm. Histologic studies confirmed that it was a cystic metastasis of the squamous cell carcinoma with a nonkeratinizing epithelium compatible with a metastasis of the primary uterine cervix tumor (fig. 2B, C y D). The patient was admitted to the



Figure 1 View of the tumor immediately prior to excision. Note the tumor size as well as the collateral vascularization on its surface.



Figure 2 Pelvic CT-scan showing the arrangement of the neoplasm over the gluteal aponeurosis and its growth into the subcutaneous fat tissue.

Hematology Department in March 2008 for acute leukemia secondary to a myeloproliferative syndrome. Active treatment was ruled out at that point and the patient died in May 2008 as a result of a hemorrhage that could not be stemmed.

Most cases of recurrent uterine cervix carcinoma occur in the pelvic area at 2 years from diagnosis of the primary tumor. The most usual areas for metastasis are the liver (24%), the lung (14%) and the vertebrae (8%)². Skin and subcutaneous tissue metastases occur in 2% of all solid tumors and are more frequent in breast, lung, intestine and ovary tumors³. In cervical cancer the incidence is under 0.8%^{2,3}. Less than 1% of all blood metastases are located in the skeletal muscles, although around 50% of human body weight is constituted by muscle and considering that muscles are characterized by their rich vascularity¹. Tumors known for their potential to metastasize to muscle are melanoma and renal, pulmonary and thyroid tumors. Muscle metastases caused by lymphoma, leukemia and colon cancer have also been reported¹. Muscle metastases derived from uterine cervix carcinoma are extremely rare^{4,5}. In the patient discussed herein, the metastasis was located subcutaneously and was infiltrating the superficial aponeurosis of the gluteus maximus, which was partially resected.

Diagnosing metastasis to soft tissue can be a complicated endeavor. These lesions tend to be painful, palpable and even cause deformities depending on their location, but they may also occur asymptotically^{4,5}, be interpreted as non-malignant lesions or even be confused with soft tissue sarcomas, whose prognosis and treatment are different^{1,6}. They can also present as an initial manifestation of an occult primary tumor, for which reason their histological detection is crucial in order to design an appropriate treatment protocol¹. Imaging diagnosis is normally of great help^{1,7}. In our case, however, it was not helpful for diagnosis: none of the imaging techniques employed indicated that we were confronted with a malignant neoplasm, probably due to the unusual fluid content in the mass. Only the presence of hypervascularization around the cyst wall, revealed by the echo-Doppler, alerted us to the mass' true etiology. There are no guidelines or protocols for the therapeutic management of metastases of uterine cervix carcinomas into soft tissues. Options available include radiation therapy, chemotherapy and surgical resection, which can be employed either in isolation or in combination, depending on the clinical situation of the patient. We decided to apply combined treatment based on external radiation onto the affected area plus chemotherapy and, given that the location of the lesion made it amenable to low-morbidity excision, that the patient's clinical status was satisfactory at that moment and that the situation of the other metastatic lesions in the ribs and the pelvis was stationary, we decided to perform a metastasectomy.

There are reports in the literature on metastases of squamous cell carcinoma of the cervix to soft tissues, but none of these share the morphologic and anatomic characteristics of the case described herein. Cystic metastases of uterine cervix carcinoma have been published to the psoas, but this type of presentation, similar to an

abscess, tends to occur in HIV+ patients, where the baseline gynecologic disease tends to behave more aggressively^{4,8}. This type of lesion has also been reported in seronegative patients, but always circumscribed to the psoas muscle in the context of a blood metastasis^{5,6}. The prognosis of patients developing metastases to the soft tissues is normally poor since they generally already present with a diffuse metastatic disease^{1,6}. To conclude, ours is a case of cystic metastasis in an atypical location experienced by a patient with a stage IV uterine cervix carcinoma. The appearance of a lesion of this nature in a patient with a known primary tumor indicates that the metastasis must be ruled out as a possible diagnosis for the neoplasm.

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