METASTATIC LESION OF THE CERVICAL SPINE SECONDARY TO AN EXTRAOCULAR SEBACEOUS CARCINOMA

S. A. ANTUÑA, J. G. MÉNDEZ, J. A. CINCUNEGUI, J. C. LÓPEZ-FANJUL

A case of cervical spine metastasis from an extraocular sebaceous carcinoma of the scalp is presented. Anterior decompression and fusion were performed and resulted in complete relief of symptoms. Postoperatively the primary tumor behaved in a very aggressive manner, with visceral metastases leading to the death of the patient in a few weeks.

Keywords: cervical spine; metastasis; sebaceous carcinoma.

Mots-clés: colonne cervicale; métastase; carcinome sébacé.

INTRODUCTION

Metastatic involvement of the cervical spine is uncommon, breast cancer being the most frequently primary tumor encountered (1, 6). Cervical metastases from skin cancers are very infrequent (2). We describe a case of a cervical spine metastasis from an extraocular sebaceous carcinoma of the scalp. Only a few cases of this type of neoplasm have been reported previously (3, 4, 8).

CASE REPORT

A 53-year-old man presented with a 4-week history of severe neck pain and paresthesias in his right arm. The patient denied any injury to the cervical spine. Five months earlier he had noticed a rapidly growing, tender mass on his right parietal scalp. An MRI examination of the head made at that time showed a subcutaneous lesion $(8 \times 8x \times 3 \text{ cm})$ with radiographic signs of malignancy, destruction of the adjacent parietal bone

and local infiltration of the dura (fig. 1). A diagnostic biopsy was made which confirmed a malignant tumor, consistent with sebaceous carcinoma. Physical and radiographic examination did not reveal any metastatic lesion. A bone scan was not obtained at that time. Surgical excision was performed and completed with several cycles of local radiotherapy. When the patient was discharged 6 weeks later, he was asymptomatic.

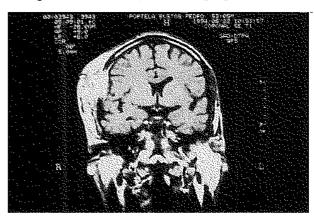


Fig. 1. — Coronal MRI view of the head showing the infiltrating scalp lesion.

When the patient was referred to us, he complained of increasing neck pain with intermittent paresthesias radiating to the right shoulder and arm. Physical examination showed a gibbous deformity of the neck with marked restriction of cervical motion. Neurologic examination revealed moderate weakness of the right arm and leg (3-4,

Department of Orthopedic Surgery. Hospital Central de Asturias. Oviedo, Spain.

Correspondence and reprints: S. A. Antuña, General Elorza 77B 5B, Oviedo 33002, Spain.

5) with no sensory loss. Deep tendon reflexes were normal. Radiographic examination showed complete destruction of the body of C4, with significant kyphotic deformity of the cervical spine (fig. 2).

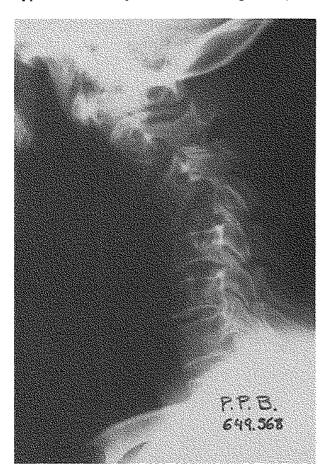


Fig 2. — Lateral radiograph of the cervical spine demonstrating absence of the body of C4 and severe kyphotic deformity.

The patient was taken to surgery with the diagnosis of a cervical metastatic lesion. Through an anterior approach, a C4 corporectomy and iliac crest grafting were performed. A Caspar plate was used for internal fixation (fig. 3). A biopsy specimen was obtained. Postoperatively, the patient was placed in a cervical collar. Histopathologic examination revealed that the bone marrow was infiltrated by pleomorphic sebaceous cells with abundant foamy, vacuolated, eosinophilic cytoplasm. Multiple mitotic figures could be seen (fig. 4). The diagnosis was consistent with meta-

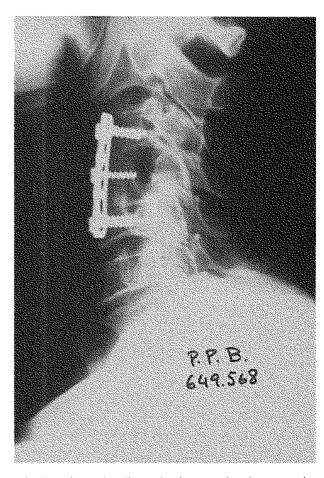


Fig 3. - Lateral radiograph after anterior decompression and fusion.

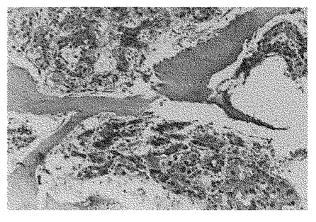


Fig 4. — Bone biopsy: Bone marrow infiltrated by sebaceous cells with large nuclei and foamy cytoplasm (HE × 100).

static extraocular sebaceous carcinoma. After surgery the patient's pain was relieved dramatically. The right arm paresthesias and motor weakness gradually disappeared.

On the twelfth hospital day, the patient complained of acute excruciating sciatic pain radiating to his left leg. An MRI of the lumbar spine showed metastatic destruction of L5. A Tc-99m whole-body scintigram demonstrated focal lesions in several ribs and in the lumbar spine. An abdominal CT scan showed liver metastases. Systemic chemotherapy was initiated, but the condition of the patient steadily deteriorated, and he died 8 weeks after the cervical arthrodesis was performed.

DISCUSSION

The goal of surgery in cervical spine metastases is to prevent or reverse neurologic deterioration, to correct kyphotic deformity and to relieve pain to improve the quality of life (6). When the lower cervical spine is involved, anterior decompression and stabilization is preferred by many authors (1, 5, 6). The use of a bone graft and plate fixation are recommended to enhance stability.

Cervical spine metastases from skin cancers are very uncommon, malignant melanoma being the most frequent primary tumor encountered (2). Carcinomas of the sebaceous glands arise most frequently from the eyelids in the elderly. Extraocular sebaceous carcinomas are very rare tumors, usually considered to be neoplasms of low malignant potential. These tumors do not have specific clinical features, and therefore they need histopathologic confirmation. Since only a few cases of sebaceous carcinoma arising from extraocular sites have been reported, no treatment protocol has been established. Surgical excision, completed with local radiotherapy is advocated by most authors (3, 4, 8).

Sebaceous carcinoma of the eyelid is a very aggressive tumor which frequently metastasizes to bones and other organs. The extraocular type of this neoplasm is considered to be less malignant, with low metastatic potential. Visceral metastases have been described in some of the published cases (3, 4), but bone lesions have not been

reported. Based upon the clinical behavior of the present and earlier reported cases, we believe that extraocular sebaceous carcinoma must be considered, as its ocular counterpart, an aggressive neoplasm, with clear potential to develop distant metastases that may result in death.

It is clear that in the present case a whole-body scintigraphy should have been performed immediately.

Acknowledgment

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SAMENVATTING

S. A. ANTUÑA, J. G. MÉNDEZ, J. A. CINCUNE-GUI, J. C. LÓPEZ-FANJUL. Metastase in de cervicale wervelkolom, secundair aan een extraoculair seceous carcinoom.

De auteurs rapporteren een geval van metastase in de cervicale wervelkolom afkomstig van een extra-oculair sebaceous carcinoom van de schedel. Na behandeling met anteriore decompressie en spondylodese waren de klinische tekenen volledig opgeheven. Postoperatief gebeurde er een agressieve evolutie van de primaire tumor met viscerale metastasen die aanleiding gaven tot een dodelijke afloop na een paar weken.

RÉSUMÉ

S. A. ANTUÑA, J. G. MÉNDEZ, J. A. CINCUNE-GUI, J. C. LÓPEZ-FANJUL. Métastase de la colonne cervicale, secondaire à un carcinome sébacé extraoculaire.

Nous rapportons un cas de métastase osseuse cervicale d'un carcinome sébacé du cuir chevelu. Le traitement consista en une décompression et arthrodèse antérieure qui atténua les symptômes. Dans la période postopératoire la tumeur primaire évolua de façon agressive avec développement de métastases viscérales qui entraînèrent la mort du patient en quelques semaines.