

# Meningeal Carcinomatosis, Secondary to metastatic melanoma - a Case Report

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*Meningeal carcinomatosis is a rare disease that is part of the natural history of many neoplastic processes. It usually arises with not specific symptoms, such as headache, behavioral changes or motor and sensory disturbances. Here a case of a patient with meningeal carcinomatosis, due to metastatic melanoma and its clinical evolution is reviewed.*

**Key Words:** Melanoma, meningeal carcinomatosis, leptomeninges, cutaneous neoplasia

## CLINICAL CASE

The patient is a 73-year old woman who has a record of high blood pressure, insulin-dependent diabetes mellitus 2, diabetic nephropathy, auricular fibrillation under anticoagulant therapy, and coronary cardiopathy. All of these diseases are under treatment, with good metabolic control. In 2009 she was diagnosed a melanoma in the right internal malleolus (Figure #1.). It was biopsied and operated, with a good response. She had no clinical follow-up until 2018, when she received primary care consultation. She had a suspicious lesion in the right internal malleolus with a bleeding/erythematous/painful base, with a black/violaceous/heterogeneous color, irregular, 3 x 3 cm. She was referred to a secondary level care, due to suspicion of a malignant skin lesion. It was diagnosed as a melanoma. In a staging study with a brain computerized tomography multiple focal/hemorrhagic/occipital/bilateral lesions are reported with thickening and medium contrast

**Figure #1.** Melanoma in the right internal malleolar region.



uptake of the adjacent leptomeninges, compatible with meningeal carcinomatosis (Figure #2.) The patient was admitted to palliative care. She was managed with morphine, as required, along with pregabalin, risperidone, dexamethasone and phenytoin per hours. She evolved with good tolerance to pain, as per medical manage-

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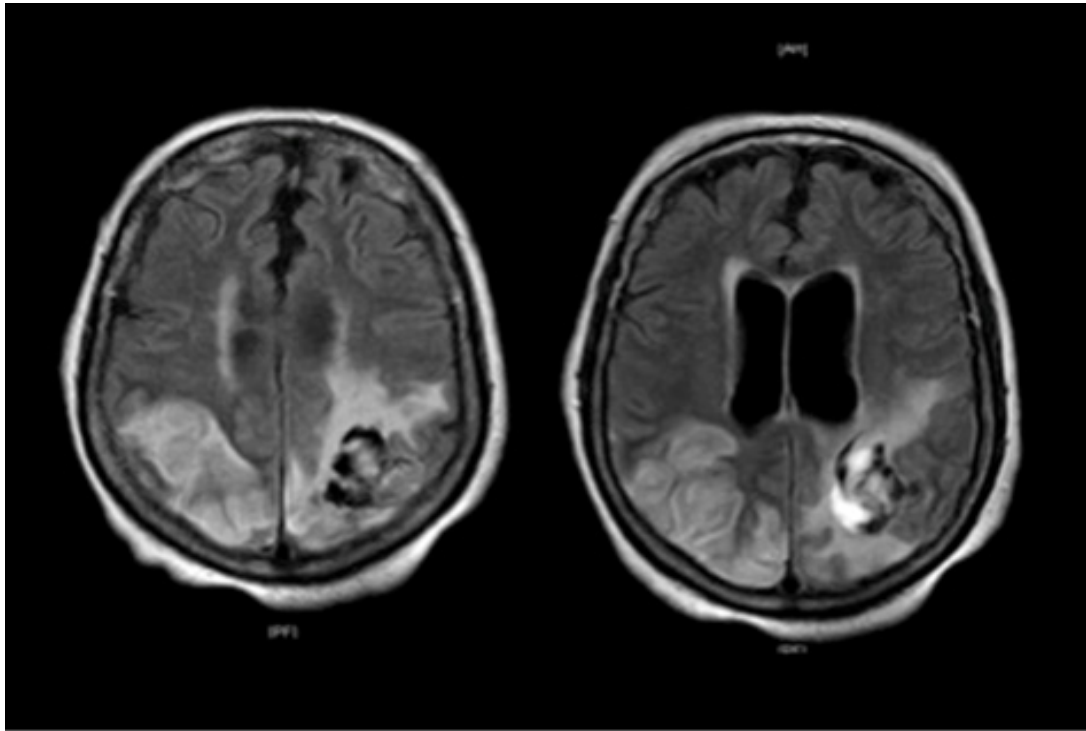
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**Figure #2.** Brain computerized tomography: images compatible with bleeding bilateral occipital metastasis, with signs of meningeal carcinomatosis.



ment, but she had progression of neurological symptoms with qualitative compromise. In the following months she evolved with higher disorientation, agitation and compromised consciousness. She died five months after her diagnosis.

## DISCUSSION

Melanoma is the least frequent cancer, but it is the most lethal among cutaneous neoplasia.<sup>6</sup> Despite its incidence and mortality all over the world is not high (3.0 and .7 every 100,000 patients, respectively),<sup>7</sup> its increase to 7% annual incidence, in regions such as USA, turns that into a matter of concern for public health.<sup>8</sup> Melanomas may generate metastasis, at early stages, even in lesions smaller than 1 mm thick (5 to 15% of all cases) which usually spread to other organs, especially the central nervous system.<sup>9</sup> On the other hand, neoplasia has the highest index of brain metastasis, which occur in more than 50% of all advanced-stage patients.<sup>10</sup> MC due to melanoma has an extremely unfavorable prognosis, with a median survival of 17 a

22 weeks.<sup>10,11</sup> Currently, treatment choices include radiotherapy in involved areas, systemic chemotherapy or directed therapy, intrathecal chemotherapy and palliative care with dexamethasone.<sup>12</sup> Despite that the various types of treatments available may provide some local control of the disease, at the level of the brain, most therapies are associated to low response rates (~10%) and must be offered to duly evaluated patients. Early diagnosis is fundamental for the physician/oncologist to start the right treatment, prior to neurologic impairment. Initially it must be studied with neuroimages, to be further diagnosed by means of a cytological study of the cerebrospinal fluid<sup>5</sup>. Multiple punctures may be necessary, as only one lumbar puncture has an accuracy diagnostic of 50 to 60% only.<sup>13</sup>

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