Neglected Basal Cell Carcinoma With Fatal Outcome

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Introduction

Basal cell carcinoma (BCC) is the most common malignancy in Western populations. Metastatic BCC (mBCC), however, is extremely rare and occurs in only 0.0028%-0.55% of cases. Despite the recent introduction of hedgehog pathway inhibitors, the prognosis for mBCC remains poor [1].

Case Presentation

A 73-year-old previously healthy Caucasian woman was admitted to Uddevalla Hospital because of her impaired general condition. Her hemoglobin level was 40 g/L and she had experienced significant weight loss. Physical examination revealed a 37-×14-cm ulcerated tumor from the cervical region vertebra C7 to the level of vertebrae L1-L2 (Figure 1A). The tumor had been growing on her back for the last decade. Biopsies of the tumor showed an infiltrative BCC. Three firm subcutaneous nodules could be visualized and palpated along the in-transit route toward the right axilla with 2 nodules located 1 and 7 cm, respectively, from the ulcerated tumor and a third in the right axilla.

MRI showed infiltrative tumor growth into the underlying subcutaneous tissues including muscles and spinous processes. The presence of metastases was difficult to assess with computed tomography (CT) because of the large amount of pleural fluid (Figure 2A). Plastic surgeons were consulted, but the tumor was considered inoperable. Multidisciplinary consultation resulted in a recommendation of systemic therapy with the hedgehog pathway inhibitor vismodegib 150 mg per os per day.

During the first 3 months of treatment, the tumor shrank significantly to 24×12 cm. However, a new CT scan revealed a suspected metastasis 20 mm in diameter in the inferior lobe of the right lung and 4 smaller metastases in the inferior lobe of the left lung. Oncologists were consulted, but since the side effects of vismodegib were considered moderate (mild muscle cramps, diffuse alopecia, and ageusia), it was recommended that the patient continue with vismodegib.

After 7 months of treatment, a third CT scan detected several new 2- to 3-mm metastases in both lungs, and the
small metastases that were detected in previous CT scans had increased in size (Figure 2B). Furthermore, the healing process of the large BCC on the back had ceased (Figure 1B). The decreasing effect of vismodegib was suspected to be caused by resistance development. The treatment was finally discontinued after 12 months. The patient died 6 months later, which was 1 year and 10 months after the diagnosis.

Conclusions

This rare case is a reminder of the potential of BCCs to metastasize and even cause a fatal outcome. mBCC has been associated with a high mortality rate, with median survival of only 8-10 months after the diagnosis [2]. The tumor size was considered the only risk factor for mBCC in this patient. Because of the patient’s unwillingness and the general palliative approach, biopsies were not taken to confirm that the lung metastases were from the BCC. However, the patient had no other known cancers or symptoms suggesting other origins. Although vismodegib showed good effect initially, the response was only partial. The response rate of this relatively new medicine in patients with mBCC has varied between 30.0% and 37.9% [1].

References