Background

Basal cell carcinoma (BCC) is the most common malignancies worldwide boasting one of the most favorable prognoses due disease tendency to remain local. Yet, clinical presentation with rare distant metastases greatly increases morbidity and mortality (Di Lernia). Due to this combination of rarity and severity of prognosis, it remains difficult yet essential to diagnosis early especially considering the possibility for intervention (Laga). When diagnosed early, most basal cell carcinomas are treated with in-office therapies varying from topical agents and superficial destruction to more invasive techniques, including surgeries and systemic therapy. These techniques function best with lower stage cancers as no effective therapy exists for locally advanced or metastatic carcinoma (Bichakjian). More recently, emerging molecularly targeted therapies, Vismodegib and Sonedigib, challenge this assertion through demonstrated efficacy among patients with advanced and metastatic basal cell carcinoma (Sekulic, Jacobsen 2016).

Case Report

History of Original Lesion

A 62-year-old white non-Hispanic male was diagnosed in 12/2015 with nodulocystic basal cell carcinoma after 3-year history of progressively enlarging left shoulder mass. Subsequent imaging at time of diagnosis revealed invasion of primary tumor into left lower neck with lymphadenopathy in the left subclavicular space with potential metastases in apical left lung and thoracic spine leading to symptoms of spinal stenosis. Histopathological review of epidermis and dermis show an ablative basoid proliferation with peripheral palisading architecture extending into and infiltrating dermis and muscle. There is some artifact and tumor necrosis. Tumor cells are positive for CKA/6. Nuclei are positive for P63. Tumor Cells are negative for CEA and EMA (Appropriate controls reviewed). The lesion is transected at the base.

Interval History:

11/2017: patient admitted for 1-month history of losing ability to walk. Pt noted improvement after surgical debulking (cervicotoracoscopic decompression, fusion reduction and T2 and T3 laminectomies). Portal bone biopsy confirmed basal cell carcinoma. Patient at this time completed palliative radiation treatment and was started on second-line treatment, Sonedigib 200 mg qd.

02/2018-06/2019: Interval imaging noted the patient to have possible slight reduction and T2 and T3 laminectomies). Portal bone biopsy confirmed basal cell carcinoma. Patient at this time completed palliative radiation treatment and was started on second-line treatment, Sonedigib 200 mg qd.

Results

Histopathologic Findings: Sections are of epidermis and dermis and disclose an atypical basaloid proliferation with peripheral palisading architecture extending into a fibrotic and infiltrated dermis. There is some artifact and tumor necrosis. Tumor cells are positive for CK5/6. Nuclei are positive for P63. Tumor Cells are negative for CEA and EMA (Appropriate controls reviewed). The lesion is transected at the base.

Clinical and radiologic findings: CT C/A/P with no new disease or progression in abdomen and cord. Pt underwent thoracic spine debulking procedures with ability to walk prior to admission at time of diagnosis revealed invasion of primary tumor into left lower neck with lymphadenopathy in the left subclavicular space with potential metastases in apical left lung and thoracic spine leading to symptoms of spinal stenosis. Histopathological review of epidermis and dermis show an ablative basoid proliferation with peripheral palisading architecture extending into and infiltrating dermis and muscle. There is some artifact and tumor necrosis. Tumor cells are positive for CKA/6. Nuclei are positive for P63. Tumor Cells are negative for CEA and EMA (Appropriate controls reviewed). The lesion is transected at the base.

Characterizing Previous Research

Literature Review was conducted in two phases: 1) 11/14/2019 on PubMed using search terms for “Metastatic” + “Basal Cell Carcinoma” v/s “spine metastases” and “pulmonary metastases” this search yielded 38 articles, which were chosen based on publication in English, available abstract, and available full text article, and 2) inserting these articles into Medscape app to look for a matching publication, then using the “related document” to find an additional 8 articles. These methods combined to create a total of 46 articles (once filtered for available full text) form which to draw conclusions. The best policy for metastatic BCC is prevention. The best policy for metastatic BCC is prevention. The best policy for metastatic BCC is prevention.

Material and Methods

Discussion

Recommendations

Results

Figure 2 (above) shows successfully high magnification of the pulmonary metastases in our patient. (40x left, 100x middle, 200x right)

References