

## **Statement of Disclosure**

Within the past 12 months, I or my spouse have not had any financial interests/arrangement or affiliations with any academic or private institutions

# A case of metastatic basal cell carcinoma (BCC) with spinal and pulmonary metastases

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## Learning Objectives

- 1) Contrast basal BCC morbidity and with BCC presenting with distant metastases
- 2) Describe the common presenting patterns of BCC distant metastases: metastasis locations and presenting symptoms
- 3) Discuss the use Vismodegib as a therapeutic, its efficacy, and outcomes

## Abstract Body:

Basal Cell Carcinoma (BCC) is the most common malignancies worldwide and has one of the most favorable outcomes. However presentation with rare distant metastases greatly increase morbidity and mortality.<sup>1</sup> Historically, no effective therapies have existed for locally advanced or metastatic BCC.<sup>2</sup> Recent research highlights the effectiveness of a small molecule inhibitor, Vismodegib, in patients with advanced and metastatic BCC.<sup>3</sup> We present the case of a 62-year-old, Caucasian male with a history of a large, left shoulder BCC status-post excision and treatment with Vismodegib. He presented to Vidant Medical Center following a recent fall, weakness and ataxia. Patient denied any history of previous falls or incontinence in the preceding weeks but endorsed progressive lower extremity weakness resulting in poor balance. No other significant physical exam findings were noted. Surgical excision and examination confirmed a diagnosis of nodulocystic BCC in the primary lesion. MRI and CT of chest revealed probable metastases to apical segment of upper left lobe and thoracic spine – leading to spinal stenosis and probable cause of patient symptoms. Punch Biopsy samples were stained using H&E. Literature review was conducted using PubMed and the Mendeley App “Related Documents” tool using search terms for “Metastatic” and “Basal Cell Carcinoma” +/- “spine metastases” and “pulmonary metastases” – which yield 16 articles. Due to the ability of BCCs to transform during metastasis, it is impossible to identify the nature of metastatic lesions (i.e. basaloid, squamous or hybrid) without biopsy. In cases of treatment with Vismodegib, an increased incidence of transformation to squamous or hybrid squamous-basilar lesions has been noted.<sup>4</sup> Despite only 15% of primary tumors have reports of squamous differentiation, high index of suspicion is required as squamous variants are more aggressive and respond less well to treatments for basaloid carcinomas.<sup>5</sup> However, criteria for basal cell metastases from Farmer, Lattes, and Kessler has been established to help aid in the diagnosis of BCC metastasis. While identification is challenging, the best policy for metastatic BCC is prevention. Considering the appreciable number of cases of metastatic BCC associated with incomplete excision followed by immediate wound closure (particularly by grafting), it is best practice to recommend a meticulous and patient approach to treatment. Therefore, delayed wound grafting for at least six months after large excision or recurrent BCC is recommended to ensure complete removal.<sup>6</sup>

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