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## Metastatic Lobular Breast Carcinoma in a Meningioma: A Case Study

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Hormonal relationships between breast carcinoma and meningioma have long been reported in the literature. This association may be related to the widespread expression of progesterone receptors in meningiomas. Indeed, meningiomas are more common in women and may demonstrate increased growth during pregnancy. Women have an increased risk of meningioma following breast carcinoma diagnosis and vice versa. However, much more uncommon is a tumor to tumor metastases of breast carcinoma into a meningioma. We report a case of a 56 year old female with a past medical history of breast cancer, found to have a right sphenoorbital meningioma with metastatic lobular carcinoma. Pathological findings include a WHO grade 1, transitional meningioma with IHC staining for EMA, marking not only a meningioma but also linearly arranged epithelioid cells. Determined to be metastases of invasive lobular carcinoma, these epithelioid cells were E-cadherin negative and GATA3, GCDFPmammoglobin, and ER positive. Progesterone receptor staining was inconclusive due to the strongly progesterone staining meningioma. Radiographic studies lack the sensitivity or specificity to diagnose intrameningioma metastases. Furthermore, because meningiomas and breast carcinomas are often both steroid receptor and EMA positive, careful histopathologic analysis of the entire meningioma may help to overcome challenges in diagnosing such metastases.