Acral Metastasis: An Uncommon Metastatic Site

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**Purpose:** Case report of acral metastasis

**Methods:** Review of Electronic Health Records and literature review

**Results:** A 70-year-old female presented with pain and swelling of the distal thumb. She had a history of metaplastic breast carcinoma (MBC) with neuroendocrine features diagnosed and treated 5 years prior. She was found to have lung metastasis but declined therapy. Five months later she presented with the aforementioned thumb symptoms. X-ray of the hand showed an erosive soft tissue mass on the first distal phalanx with differential diagnosis of metastasis, primary bone tumor, or infection. She was unsuccessfully treated with antibiotics. She received palliative radiation to the thumb and started systemic chemotherapy with liposomal doxorubicin. Six weeks later patient reports significant improvement in pain and swelling of the distal thumb.

Bone metastases are common, but metastases to the hands and feet are rare, comprising around 0.1% of all cases. They are often the presenting sign of underlying malignancy. The distal phalanx of the third and first digits are the most affected sites. The reason for the scarcity of distal metastasis is incompletely understood, but is likely due to undesirable microenvironmental factors in the acral skeleton such as brisk venous blood flow and paucity of red marrow. The low incidence of acrometastasis can create a diagnostic dilemma; low suspicion can lead to the presumption of infection or benign bone pathology rather than malignancy, delaying diagnosis and initiation of treatment. Once identified, management includes any combination of radiotherapy, excision, and amputation. Prognosis is multifactorial, but median survival is 6-8 months from time of diagnosis.

**Conclusion:** This case highlights the rarity of distal metastases as heralds of primary tumors and provides an impetus to clinicians to consider malignancy in a patient with any such distal lesion. Increased awareness of such presentations can afford earlier diagnosis and prompt treatment with the hopes of improving outcomes in patients presenting with such unique findings.