Skeletal Muscle Metastases Masquerading as Micro-abscesses

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INTRODUCTION

• Skeletal muscle metastases (SMM) is a rare phenomenon, with an estimated prevalence of 1.2-1.8%.1
• The most commonly reported carcinomas to metastasize to the skeletal muscle are lung, kidney and colon.2
• Around the world, lung cancer is the leading cause of cancer-associated deaths. At the time of diagnosis, approximately 50% of cases are metastatic and 60% of patients have microscopic metastatic disease.3
• Skeletal muscle metastases portends a poor prognosis.4

CLINICAL COURSE

• The muscle biopsy was sent for culture and pathologic analysis.
• Cultures from the biopsy were negative.
• Pathology revealed poorly differentiated epithelioid malignancy, consistent with his lung primary.
• The patient was treated with palliative radiation to his right thigh.
• Despite palliative radiation, he was readmitted within a month with intractable pain and was transitioned to comfort measures.

DISCUSSION

• Although skeletal muscle accounts for nearly 50% of the total body mass, metastases to the skeletal muscle is uncommonly encountered in clinical practice.4
• It has been hypothesized that skeletal muscle is a hostile environment for tumor cells due to high metabolic activity and blood flow variability.
• Diagnosis of SMM can be difficult due to a broad array of appearances on imaging.
• The majority of patients with SMM die within a year of diagnosis.6
• There are no guidelines on optimal management of SMM, palliative radiation/surgery can be considered.

CONCLUSION

SMM is a rare entity uncommonly encountered in clinical practice and is associated with a poor prognosis. Further research regarding optimal treatment regimens is needed.