

Radiological Analysis of Skeletal Metastases from Cervical Cancer

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Abstract : Cervical carcinoma is the second most common cancer found in women. Diagnosis of skeletal metastases is uncommon in cervical cancer patients. The aim of this study was to determine the prevalence of skeletal metastases in a Western Cape skeletal population. Skeletal samples (n=14) from the Kirsten Skeletal Collection at Stellenbosch University, diagnosed pre-mortem with cervical cancer, were examined. Macroscopic analysis was done using low magnification to examine each skeletal element for signs of disease. Skeletons were also x-rayed using the Lodox® Statscan® Imaging system and the scans evaluated by a musculoskeletal radiologist. Three (21%) of the skeletons showed metastases, with the os coxae and lower vertebral column affected in all three cases. Furthermore, metastases occurred in the scapulae and ribs in two of the cases and in one case the skull, mandible, and long bones were affected. Additionally, three skeletons without evidence of skeletal metastases presented with a periosteal reaction on the os coxae in response to the diseased adjacent soft tissue. Previous studies observed that skeletal metastases are more common than what is diagnosed pre-mortem with the vertebral spine most commonly affected. The findings of this study agree with previous reports and illustrate the effectiveness of the Lodox® scanner in diagnoses of metastases in skeletal material.

Keywords : cancer, cervix, radiology, skeletal metastases

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