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Diagnostic Radiology and Molecular Imaging

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Musculoskeletal manifestations of diabetes mellitus

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Poster #2

MUSCULOSKELETAL MANIFESTATIONS OF DIABETES MELLITUS: A REVIEW FOR THE PRACTICING RADIOLOGIST AND RADIOLOGIST IN TRAINING, WITH EMPHASIS ON CLINICAL PRESENTATION, PATHOGENESIS, AND IMAGING APPEARANCE.

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(Presented by: Alexander Grushky, MD, Beaumont Health System)

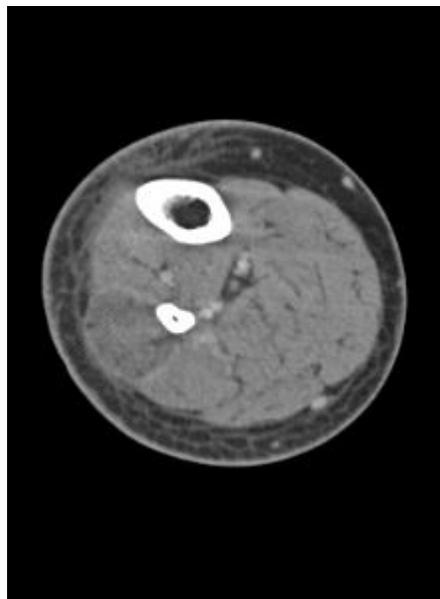
Purpose: To review and highlight the musculoskeletal manifestations of diabetes mellitus (DM), including osteomyelitis, neuropathic arthropathy, diabetic myonecrosis, and dialysis-associated spondyloarthropathy. The imaging appearance of these various entities will be highlighted at commonly encountered locations, including the spine, thigh, and foot. This exhibit also will provide a useful and relevant review of the clinical presentation and pathogenesis of the various DM-related entities. Emphasis will be placed on features that may help distinguish these entities from other similar appearing processes, with the goal of avoiding unnecessary patient imaging, intervention, and morbidity.

Materials and Methods: This exhibit will review the clinical presentation and multi-modality imaging appearance of DM-related musculoskeletal pathology using a practical case-based approach, with the goal of educating the practicing radiologist and radiologist in training to facilitate early and accurate recognition of these conditions.

Results: Diabetes mellitus is one of the most common chronic disease processes in the body and has a wide range of musculoskeletal manifestations which must be recognized by the practicing radiologist and radiologist in training. This exhibit will provide education regarding common diabetes mellitus related musculoskeletal pathologic conditions, sites of occurrence, and multimodality imaging appearance.

Conclusion: Diabetes mellitus involves the musculoskeletal system through a variety of pathologic entities which require accurate and prompt diagnosis to avoid severe, and potentially fatal, complications. Given the prevalence of diabetes mellitus in the general population, an increased understanding of the DM-related musculoskeletal pathology spectrum will help the practicing radiologist and radiologist in training recognize these entities and provide swift diagnosis allowing adequate and appropriate treatment.

Modality % - Radiography / Fluoroscopy:	10
Modality % - CT:	45
Modality % - MRI:	45
Modality % - US:	0
Modality % - Nuclear Medicine:	0



Enlargement and relative hypodensity of the peroneal muscles with bulging of the fascia superficial to the musculature and deep to the subcutaneous tissues.