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Clinical Image

Monckeberg's Arteriosclerosis in Type-2 Diabetes Mellitus

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A 70 year old male patient with Type-2 Diabetes Mellitus (DM) and Essential hypertension since 20 years was brought with history of swelling of both legs and an ulcer over the right foot. On relevant investigations, plain X-ray of the right foot in Antero-Posterior view showed calcified faint outline of dorsalis pedis artery between first and second metatarsals (Figure 1). This is also referred as Medial Calcific Sclerosis because of the involvement of the middle layer (tunica media) of the arteries, where there is destruction of muscle and elastic fibers and formation of calcium deposits. Considered a rare finding in DM, studies report that medial artery calcification is a strong marker of future cardiovascular events in Type-2 DM unrelated to cardiovascular risk factors, supporting the hypothesis that reduced arterial elasticity could lead to clinical manifestations of diabetic macroangiopathy. Often found incidentally on radiographs is also seen in conditions like Chronic Kidney Disease, Systemic Lupus Erythematosis and Hypervitaminosis- D.

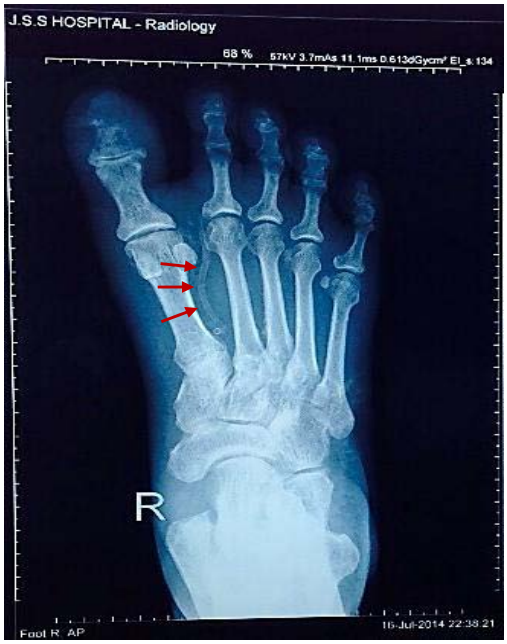

Figure 1: Arterial Calcification – Monckeberg's.
(Pointer: Calcified faint outline of Dorsalis Pedis Artery between first and second metatarsals)

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