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**Is there an association between lower limb vascular calcification and amputation in diabetic patients with a foot wound?**

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**Background and aims:** Peripheral arterial disease is recognised as a significant risk factor for diabetic foot complications. Together with other risk factors it is responsible for the majority of the overall non-traumatic lower limb amputations. Identification and subsequent effective management of risk factors for diabetes-related lower limb amputation will help prevent or decrease the number of overall amputations. Lower limb vascular calcification is recognised as a strong indicator of peripheral arterial disease and may be easily interpreted by the physician via the use of a plain x-ray. We aimed to evaluate the association of lower limb vascular calcification and amputation in diabetic patients with a foot wound. **Patients and methods:** We retrospectively evaluated the records of 112 diabetic patients hospitalized in our service during January 2007 and December 2008 with a foot wound and identified 53 patients with a foot plain x ray. Roentgenograms were evaluated for lower limb vascular calcification by a radiologist blind to clinical data. Any vascular calcification, either in an irregular or regular pattern, lining the vessel walls was considered a positive sign. **Results:** Of the 53 patients with a foot roentgenogram 26 were reported to have lower limb vascular calcification and 18 (69,2 %) of these patients eventually required an amputation. However, only 5 (%18,5) of the 27 patients without lower limb vascular calcification required amputation. Patients with a positive sign of lower limb vascular calcification had a 3.74 fold increased risk for developing a lower limb amputation compared to patients who did not have any sign of peripheral arterial disease in plain x rays. The positive predictive value was found to be 69,2% and the negative predictive value was 81,4 %. **Conclusion:** Results of this pilot study suggests a strong association with amputation and lower limb vascular calcification in diabetic patients with a foot wound. These results also support the consideration of lower limb vascular calcification as a strong foot-at-risk sign. However due to limitations of sample size no definitive conclusion can drawn from this report and further prospective long-term follow-up studies are warranted to better evaluate this association.