****

**6110**

FREQUENCY OF DIABETIC CHEIROARTHROPATHY AMONG PATIENTS OF ATBARA TEACHING HOSPITAL REFERRAL CLINIC BETWEEN JULY AND NOVEMBER 2024

Background:

Diabetic cheiroarthropathy (DC), also known as limited joint mobility syndrome, is a common but often under-recognized complication of diabetes, characterized by thickening and stiffness of the skin on the hands and limited range of motion in the fingers, significantly impacting patients' quality of life and functional abilities.

Objective:

This cross-sectional study aimed to determine the frequency of DC among diabetic patients attending the Atbara Teaching Hospital referral clinic in Sudan and explore its association with diabetes duration, glycemic control, and other diabetic complications.

Methods:

This cross-sectional study enrolled 160 diabetic patients between June and August 2024 at the Atbara Teaching Hospital referral clinic. A detailed, structured questionnaire was administered to collect demographic information, diabetes history, and comorbidity data. DC was diagnosed based on the presence of thickened, waxy skin on the hands and limited range of motion of the fingers, confirmed by a positive prayer sign (inability to fully oppose palms) and/or tabletop test (inability to lay the hand flat on a table). Data were analyzed using SPSS version 23.

Results:

The study population comprised 160 participants, with 87 (54.4%) males and 73 (45.6%) females. The mean age was 55.6 ± 12.8 years, with the majority (58.1%) aged between 50 and 69 years. Diabetic cheiroarthropathy was diagnosed in 73 participants (45.6%). The prevalence of DC was significantly higher among those with poor glycemic control (55.4% vs. 29%, p=0.002). Multiple logistic regression analysis confirmed that longer diabetes duration was a strong independent predictor of DC.

Conclusion:

Diabetes duration is a significant and independent predictor of DC in Sudanese diabetic patients, highlighting the cumulative effect of hyperglycemia on joint health. The clinical manifestations of DC appear to be more pronounced in those with poor glycemic control.

