

**Insensate foot of diabetic foot ulcer can have underlying silent neuropathic pain**

YM Yunus, SM Rajbhandari

Diabetes Unit, Lancashire Teaching Hospital, Chorley PR7 1PP, UK

**Background:** Subjects with diabetic foot ulcer (DFU) have insensate feet and are less likely to complain of symptoms of painful neuropathy (PN). It is not clear if it is due to absence of pain or due to the fact that they are more troubled by ulcers and do not report it. **Aims:** The aim of this study was to investigate the perception of pain and presence of PN in subjects with DFU attending hospital clinic. **Subjects and Methods:** This was a prospective study performed at 2 hospital sites in general diabetes and diabetic foot clinic. Subjects known to have PN and on treatment that can modulate PN were excluded. Perception of pain was assessed using visual analogue score (VAS) and PN was assessed using Leeds Assessment of Neuropathic Symptoms and Signs (LANNS) questionnaire, which is a validated tool to diagnose painful neuropathy. Subjects attending general diabetes clinic in the hospital were diabetic controls (DC). **Results:** 36 DFU (9 female) and 24 DC (10 female) with similar HbA1c [8.0 ( $\pm$ 1.9) vs 8.7 ( $\pm$ 1.5)%:  $p=0.06$ ] were studied during 3 months period by a single observer. DFU were older [68.3( $\pm$ 12.6) vs 59.7 ( $\pm$ 13.3) yrs;  $p=0.023$ ] and had longer duration of diabetes [15.3 ( $\pm$ 10.1) vs 10.1 ( $\pm$ 8.5) yrs:  $p=0.049$ ]. VAS was similar in both groups [3.9 ( $\pm$  3.6) vs 3.3 ( $\pm$  3.0)  $p=0.56$ ] however the LANNS score  $>12$  suggesting underlying PN was significantly ( $p=0.019$ ) more prevalent in DFU than DC group [11 (30.6%) vs 1 (0.4%)], which was significant ( $p=0.05$ ) even after correction for age and duration of diabetes. **Discussion:** This study suggests that subjects with DFU may suffer from PN but do not perceive this and may not complain. Further studies are needed to assess if treatment of PN in these subjects is beneficial.