

**The use of PICC lines to treat diabetic foot infection and avoid admission to hospital**

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We report the novel use of peripherally inserted central catheters (PICC lines) in the management of diabetic foot infection in 31 diabetic patients who were treated with intravenous antibiotics. There were 22 males; 9 females; 8 type 1 diabetes; 23 type 2 diabetes. Mean age was 59 years  $\pm$ 10.6 and mean duration of diabetes was 18 years  $\pm$ 11.4. Mean HbA1C was 68 $\pm$ 16.8 mmol/mol.

The reasons for treatment with PICC line were acute onset infections in the foot in 72% and for long term treatment of persistent infection in the remaining cases. Osteomyelitis was observed in 24% of the total. In 40% of cases the PICC line was inserted prior to emergency or elective surgery. The median duration of treatment with IV antibiotics was 9 weeks (2-65 weeks) and the median duration of PICC line in situ was 9 weeks (range 3 - 67 week). In 21 patients the original PICC line inserted at the onset of IV therapy remained in situ throughout the treatment and did not need replacement. However, 8 patients needed one replacement of the PICC line during IV therapy and 2 patients required 2 replacements of the PICC line.

The use of PICC lines resulted in avoidance of admission to hospital in 30% of cases. In 46% of cases who were admitted to hospital, PICC line insertion enabled them to be discharged early. Ulcers healed in 51%, improved in 43% and 6% remained unhealed.

We believe the use of the PICC line to be a significant advance in the management of diabetic foot infection,