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Hyperbaric Oxygen Therapy in the Management of Diabetic Lower Limb Wounds.

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INTRODUCTION: Hyperbaric oxygen therapy (HBOT) involves the inhalation of 100 percent oxygen at pressures greater than at sea level. One of the most common indications for HBOT is to aid healing of diabetic foot wounds. METHODS: All cases of diabetic foot wounds that were seen by the Hyperbaric Medicine Centre in Tan Tock Seng Hospital from May 2005 to March 2006 were analyzed in terms of outcome (wound healing) after HBOT. RESULTS: A total of 45 cases of foot ulcers/wounds were analyzed. 32 patients had a favorable outcome, giving a success rate of 71 percent. The remaining 13 (28 percent) did not have a favorable outcome to HBOT. The success rate was even more significant as a large number of these patients (34 [77 percent]) were told by their specialist that they were at high risk of a further amputation. No major complications were noted.

CONCLUSION: The experience of the Hyperbaric Medicine Centre in Singapore is consistent with that reported in other centres. With proper patient selection, HBOT, together with a multidisciplinary team of vascular and orthopaedic surgeons, podiatrists, infection disease physicians and endocrinologists, can help reduce the numbers and severity of amputations as well as downtime due to increased wound healing.

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