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**Transcutaneous oxymetry (TcPO2) in the detecting of patients with high risk of foot problems.**

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**Purpose:** To test the hypothesis that lower extremity transcutaneous oxygen (TcPO2) measurements can be used to screening in diabetic patients with foot at risk.
**Methods:** The were three groups of patients: 23 type 2 diabetic patients with neuropathy but without ulcerations, 19 type 2 diabetic patients without foot lesions or neuropathy and 18 normal subjects as a control group. The skin blood flow was determined by measuring the transcutaneous oxygen pressure (TcPO2) at the dorsum of the foot in supine and sitting position. The clinical assessment included standart measures, but peripheral vascular disease was excluded by Doppler ultrasound.
**Results:** In supine position, TcPO2 was significantly reduced in diabetic patients with foot at risk comparing to the diabetic patients without neuropathy (28 +/-12 mmHg and 41 +/- 10 mmHg respectively, $p<0,05$) and control group (55 +/- 11, $p<0,05$). The mean sitting/supine ratio was 1,9 +/- 0,12 in diabetic patients with foot at risk, 1,4 +/- 0,06 in diabetic patients without neuropathy, and 1,27+/- 0,05 in nondiabetic control group ($p<0,05$).
**Conclusions:** These date provide support for a close association of neuropathy and microcirculation in the pathogenesis of diabetic foot alterations in type 2 diabetic patients and may explain the poor wound healing observed in diabetes. The determination of TcPO2 appears to be a useful tool in screening type 2 diabetic patients for foot at risk.