

HOW TO INTEGRATE OXYGEN IN THERAPY: NEW ASPECTS OF TREATMENT

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In many cases, prolonged oxygen deficiency to the skin and subcutaneous tissues is associated with chronic wounds. Tissue hypoxia is considered a common aetiology for the pathological processes in wound healing disorders, particularly in patients with peripheral arterial occlusive disease, chronic venous insufficiency, and diabetes mellitus. The improvement of oxygenation is gaining increasing attention as an important aspect in modern wound care. The aim of such complementary care is to improve and accelerate wound healing.

There is a variety of different ways how to provide the chronic wound with increased level of oxygenation both internally and externally. Pharmacologically enhanced blood stream in the chronic wound is a well-known measure. Supplying necessary oxygen to a chronic wound is also external administration. Newly described methods contain e.g. application of purified haemoglobin solution added to the standard wound care, attachment of oxygen developing devices, production of oxygen radicals from photosensitizer containing nanotextiles via photodynamic technology etc. Such methods show an enhanced wound bed cleaning and wound size reduction.