Understanding Hyperbaric Oxygen Therapy and Its Use in the Treatment of Compromised Skin Grafts and Flaps.

Phillips JC.

Joan C. Phillips, RN, MSN, APRN-BC, CCRN, is Director of Vascular Services, encompassing the Vascular Laboratory, Wound Care, and Hyperbaric Medicine at William Beaumont Hospital in Royal Oak, Michigan. In 2004, the hospital opened one of the largest out-patient multiplace hyperbaric chambers in the country.

Nonhealing wounds represent a problem involving inadequate oxygenation of the tissues that can lead to hypoxic injury. Hyperbaric oxygen therapy can be used as an adjunctive therapy for compromised grafts and flaps that have failed to show improvement with standard wound therapy and offer additional physiologic benefits in the reversal of wound hypoxia and hypoperfusion. A literature review confirms the efficacy of hyperbaric oxygen therapy in nonhealing wounds and compromised skin grafts and flaps.

The purpose of this article is to review the role of oxygen and physiological effects of hyperbaric oxygen therapy in wound healing and to provide an overview of the hyperbaric oxygen therapy experience including indications, types of chambers, patient preparation, complications, and treatment protocols. This article is intended to provide nurses working in plastic surgery the information necessary to consider the benefits that hyperbaric oxygen therapy can offer to improve the healing potential of patients with compromised skin grafts and flaps.

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