Hyperbaric medicine is the fascinating use of barometric pressure for delivering increased oxygen dissolved in plasma to body tissues. Hyperbaric oxygen therapy (HOT) or hyperbaric oxygen (HBO) involves intermittent inhalation of 100% oxygen under a pressure exceeding that of the atmosphere, that is greater than 1 atmosphere absolute (ATA). Therapy is given in special therapeutic chambers which were earlier used primarily to treat illnesses of deep sea divers. There is recently a renewed interest in this field all over the world. Acute traumatic wounds, crush injuries, burns, gas gangrene and compartment syndrome are indications where addition of hyperbaric oxygen may be life and limb saving. Patients who are suffering with non-healing ulcers, decubitus ulcers (bed sores) and all late sequelae of radiation therapy are also benefited with HBO therapy. Acute hearing loss and many neurological illnesses are also now known to possibly benefit from hyperbaric oxygen therapy. This article aims to give a brief overview of the rationale, existing trends and applications of this therapy.

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