Adjunctive hyperbaric oxygen therapy contributes healing in electrical injury: a case report of high voltage electrical injury.

Istanbul University, Istanbul Medical Faculty, Department of Underwater and Hyperbaric Medicine, 34390 Capa, Istanbul. cimsit@mail.com In electrical injuries, new treatment modalities and guidelines are needed for improving clinical outcome and the survival of damaged tissue. Although there is no published study about hyperbaric oxygen (HBO) therapy for electrical injury in the literature, it is indicated in conditions, which may contribute to the clinical presentation of electrical injury such as thermal burns, crush injuries, necrotizing soft tissue infections, problematic wounds and compromised skin grafts and flaps. An 11-year-old child with high voltage electrical injury treated with adjunctive hyperbaric oxygen for 90 minutes twice a day at 2,4 ATA for one week, then once a day for six days for a total of 20 sessions was presented to demonstrate the beneficial effects of hyperbaric oxygen therapy initiated before irreversible damage had taken place. Although hyperbaric oxygen therapy was initiated rather late, when the most effective window for intervention had already past, HBO was effective in fighting against necrosis, infection and tissue loss. Adjunctive HBO therapy is suggested for electrical injuries for its contribution to healing. In order to see the favourable effects of HBO, it is better to start the treatment within the first 24 hours following injury.

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