

Hyperbaric Oxygen in the Treatment of Postoperative Infections in Paediatric Patients with Neuromuscular Spine Deformity

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Abstract:

The aim of this study is to evaluate possible benefits of hyperbaric oxygen (HBO) therapy in the treatment of deep postoperative infections in six high risk paediatric patients with neuromuscular spine deformity.

The study involved review of medical records including radiology, office visits, and telephone contacts for six patients, referred for postoperative HBO therapy in 2003–2005. Infection control and healing without removal of implants or major revision surgery with a minimum of 2-year follow-up after index surgery were considered to represent success.

All infections were resolved. Median time for wound healing, normalisation of blood tests and antibiotic weaning were 3 months. Radiological bony fusion, intact implants without any signs of radiolucent zones were seen in all cases at a mean follow-up of 54 months (37–72). Side effects of HBO treatment were minor.

Conclusion: HBO is a safe and potentially useful adjunctive tool in the treatment of early deep postoperative infections in complex situations with spinal implants in high risk paediatric patients.

Full details of the study are available.