

PP-32 Use Of Hyperbaric Oxygen Therapy In Treatment Of Postoperative Glans Ischemia  
After Hypospadias Surgery

Poster Bildiri

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**Introduction:** We aimed to present the hyperbaric oxygen therapy(HBOT) results of five patients who were operated for distal hypospadias and developed glans ischemia. **Methods:** Five patients who received HBOT after hypospadias surgery between October 2022 and April 2023 were included in this study. HBOT protocol was carried out in 2.4 ATA(45 fsw) and treatment time was 120 minutes. The number of sessions determined individually for each patient. Before and after therapy penis and glans of the patients were photographed. **Result:** Patients who developed glans ischemia were treated for the formation of necrosis demarcation line and to support wound healing. It was observed that the ischemic status improved in all patients from the first session of treatment. All patients were discharged when the wound epithelisation started after the ischemia line was demarked. Wound healing was better in patients with early detection of glans ischemia and whose sessions were started more quickly. Urethral strictures requiring urethral dilation developed in patients who started their sessions later than others. **Discussion:** Hypovascularity may develop in penile tissues in hypospadias surgeries. This may lead to the development of complications such as delayed wound healing and the need for additional surgical repair. HBOT is one of the treatment modalities used when conventional oxygen treatments used to relieve hypoxia do not yield the desired results when it comes to ischemic changes. While HBOT is used primarily due to its effects of hyperoxygenation and reduction of gas volume; it is also used as an adjunct to other treatments with secondary effects such as vasoconstriction, angiogenesis, fibroblast proliferation, increased collagen synthesis and increased leukocyte oxidative killing function. HBOT can reduce the complication rate of hypospadias surgery and provide better results by increasing the amount of dissolved oxygen in the blood, eliminating hypoxia in ischemic tissues due to reduced blood flow, and accelerating wound healing. **Conclusion:** We believe that HBOT treatment in the early period is important in preventing the progression to necrosis and reducing early and late complications in the case of post-operative glans ischemia after hypospadias surgeries.

**Keywords:** hypospadias, hyperbaric, HBOT, glans, ischemia