

HYOX

HYPERBARIC MEDICINE HEALS.

HYPERBARIC OXYGEN THERAPY BRIEF FOR THE TREATMENT OF RADIATION CYSTITIS, PROCTITIS AND PROSTATITIS

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Delayed Effects of Radiation Therapy: Difficult to successfully treat without additional interventional therapy

The **endothelial damage and decreased vascularization and oxygenation** to the pelvic tissues resulting from radiation therapy for pelvic cancers may cause injuries ranging in severance and occurrence. Continuous irrigation and other medical/surgical interventions may help alleviate symptoms, but do not directly affect the radiation cystitis (including hemorrhagic cystitis), proctitis and prostatitis.

Hyperbaric oxygen therapy has reported the most consistent results with overall healing in both arenas - resolving symptoms and reversing radiation damage - with no adverse effects. (1-7) We prescribe high concentrations of oxygen to repair the damaged blood vessels and tissues. 100 percent oxygen delivered under pressure (the equivalent of 45 feet below sea water or 2.4 ATM) in a hyperbaric chamber supersaturates every cell in the body increasing needed oxygen content by up to 1,500 percent.

Urologic and Healing Benefits of Hyperbaric Oxygen Therapy:

- Increases oxygen content in the body to heal irradiated tissues
- Stimulates angiogenesis which reverses the vascular changes induced by radiation if significant fibrosis and ischemia have not already occurred
- Decreases submucosal and perineural edema allowing better blood flow to injured areas
- Strengthens leukocytes to kill bacteria
- Hyper-oxygenates tissues prior to surgical intervention – cystoscopy / fulguration / cystectomy / resections and diversions / perineal flaps / anastomoses
- Works to diminish hematuria and pain

Referral Protocol: When any of the following symptoms manifest - gross hematuria, necrosis of vessel walls, fistula formation, and ischemia with persistent pain.

Other Covered Urologic Indications for Hyperbaric Oxygen Therapy:

Necrotizing soft tissue infections: Refer upon diagnosis when assessed by surgical findings, biopsy, MRI, or deep tissue cultures.

- Scroto-perineal fasciitis
- Fournier's gangrene

Compromised skin grafts and flaps: Refer immediately following surgery when a flap or graft to restore perfusion – look for signs of dehiscence, necrosis, blistering, erythema, and/or infection.

REFERENCES:

- (1) Bevers RFM, KurthKH and Bakker DJ. Hyperbaric oxygen treatment for hemorrhagic radiation cystitis. The Lancet, Volume 346, Issue 8978, pages 803-05, Sept 23 1995.
- (2) Del Pizzo, JJ, Chew BH, Jacobs SC, Sklar GN. Treatment of radiation induced hemorrhagic cystitis with hyperbaric oxygen:long-term follow up. J Urol. Sep 1998; 160 (3 Pt 1): 731-3 (Medline).
- (3) Lee HC, Liu CS, Chiao C, Lin SN. Hyperbaric oxygen therapy in hemorrhagic cystitis: a report of 20 cases. Undersea Hyperbaric Med. Sept 1994; 21 (3): 321-7.
- (4) Neheman A, Nativ O, Mostkovitz B, Melamed Y, Stein A. Hyperbaric oxygen therapy for radiation-induced hemorrhagic cystitis. BJU Int. Jul 2005; 96 (1): 107-9.
- (5) Pomeroy BD, Keim LW, Taylor RJ. Preoperative hyperbaric oxygen therapy for radiation induced injuries. J Urol1998; 159: 1630 – 1632.
- (6) Feldmeier JJ, Hampson NB. A systematic review of the literature reporting the application of hyperbaric oxygen prevention and treatment of delayed radiation injuries...UHM 2002; 29: 4-30.
- (7) Corman JM, McClure D., Pritchett R, Kozlowski P, Hampson NB. Treatment of radiation induced hemorrhagic cystitis with hyperbaric oxygen. J Urol 2003; 160: 2200-2

HYOX

HYPERBARIC MEDICINE HEALS.

HyOx is a comprehensive medical treatment center specializing in healing the body naturally by breathing 100 percent oxygen under pressure. Hyperbaric oxygen therapy increases oxygen content in the body by up to 1,500 percent to supersaturate every cell. This helps to fuel the healing process in patients with complications from cancer, infection, trauma, and wounds.



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