Crohn’s – Ulcerated Colitis

Hyperbaric oxygen therapy for severe ulcerative colitis.

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Hyperbaric oxygen therapy has been used to successfully treat perineal Crohn's disease. We describe the first successful use of hyperbaric oxygen therapy in the treatment of ulcerative colitis, refractory to conventional therapies. Therapy consisted of 30 courses of 100% oxygen at a pressure of 2.0 atm absolute. Clinical remission was achieved on the basis of the Truelove-Witts and disease activity index scores. Corticosteroids were successfully tapered off once remission was achieved.

Hyperbaric oxygenation as a part of the treatment of chronic ulcerohemorrhagic colitis

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34 patients with chronic ulcerohemorrhagic colitis in exacerbation were treated with hyperbaric oxygenation in addition to the routine therapy. Two chambers model "Drager" 1000 and 1200 were used. The total course of treatment included 10-12 seances with 60-75 min. exposition each. All patients improved significantly after the first 5-6 seances. The results of the treatment back up the use of hyperbaric oxygenation in the treatment of chronic ulcerohemorrhagic colitis.

Hyperbaric oxygenation and drug therapy in treatment of nonspecific ulcerative colitis and Crohn's disease

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Patients with nonspecific ulcerative colitis and Crohn's disease were treated with drug therapy (prednisolone, sulphasalazine, metronidazole per os and hydrocortisone per rectum) and subjected to 12 sessions of HBO. Every 10-14 months the HBO course was repeated. After 7 years of such a treatment a gradual partial recovery of large intestine mucosa and in some cases even its absolute recovery were observed. It was most difficult to get good results when treating lesion of distal colon segments. HBO produced a good effect when the disease was diagnosed at the early stage, when the intestine injury was accompanied by hepatobiliary system disease and in teenagers.

Hyperbaric oxygen for perianal Crohn's disease.

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Perianal involvement in Crohn's disease is common (< or = 50%), distressing, and frequently refractory to treatment. Clinical features include painful induration and stenosis, discharging fistulas, and fissures. The pathogenesis of these lesions is unclear, but local ischemia and secondary anaerobic infection may play a role. Following three sporadic reports of successful treatment with hyperbaric oxygen (HBO), we undertook a trial of this method in 10 patients with refractory perianal disease. These patients' perianal Crohn's disease had not responded to treatment that included local medications, salicylates, corticosteroids, metronidazole, or 6-mercaptopurine were treated. Treatment was administered in a hyperbaric chamber at a pressure of 2.5 atm absolute. Each session lasted 90 min, and each course consisted of 20 daily sessions. Complete healing occurred in 5 patients after one to two courses. In an additional 2, after three courses, 1 patient improved but did not heal,

and 2 did not improve. No adverse effects were noted by any of the 10 patients. Follow-up of 18 months did not reveal any recurrence. These preliminary results confirm that HBO therapy is a safe and efficient therapeutic option for perianal Crohn's disease.

Hyperbaric oxygen therapy for perineal Crohn's disease.

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Perineal lesions are a frequent and troublesome complication of Crohn's disease. Although there are various surgical and medical therapeutic regimens available to treat these lesions, all have significant associated morbidity, mortality, and toxicity. Recently, the beneficial effects of hyperbaric oxygen therapy (HBOT) have been described in patients with severe or refractory perineal disease, but the role of HBOT in larger groups or less severely affected patients has not yet been studied, nor has the minimum number of treatments required for initial or complete healing of perineal disease in this population been described. This article reviews the known and theoretical tissue effects of HBOT and discusses its potential role in treating patients with perineal Crohn's disease.

Modification of in vivo and in vitro TNF-alpha, IL-1, and IL-6 secretion by circulating monocytes during hyperbaric oxygen treatment in patients with perianal Crohn's disease.

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Treatment of perianal inflammatory lesions in Crohn's disease (CD) is unsatisfactory and novel treatment modalities are pursued. We have recently reported a good clinical effect of hyperbaric oxygen (HBO) treatment in perianal CD. In the present study, seven patients with perianal CD were subjected to daily sessions of HBO in a multiplace hyperbaric chamber. Each patient received a total of 20 sessions during a time period of 1 month, and IL-1, IL-6, and TNF-alpha measurements were done several times during the initial sessions and after completing therapy. Pretreatment cytokine levels were elevated in patients compared to age-matched 10 normal controls. During the first 7 days of treatment, IL-1, IL-6, and TNF-alpha levels in supernatants of LPS-stimulated monocytes derived from patients' peripheral blood were decreased compared to pretreatment levels. Parallel measurements of serum IL-1 levels revealed an initial elevation and thereafter decreased levels, which remained low throughout the first week of HBO treatment. After completion of therapy, cytokine levels increased to pretreatment values. We conclude that alterations in secretion of IL-1, IL-6, and TNF-alpha may be related to the good clinical effect of HBO treatment in CD patients with perianal disease.

Hyperbaric oxygenation in severe perineal Crohn's disease.

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PURPOSE: Perineal involvement in Crohn's disease is a common and distressing condition, often refractory to medical or surgical treatments. Recent reports suggest the efficacy of hyperbaric oxygenation (HBO) in the healing of perineal lesions. We evaluated HBO in severe patients with perineal Crohn's disease. METHODS: Ten consecutive patients (8 women, 2 men; mean age, 30 years) were studied. There were four superficial fissures, four cavitating ulcers, six low or superficial fistulas, two high fistulas, and one irreversible anal stenosis. All patients had received one or more medical treatments without healing the perineal lesions, and all had had previous surgery for perineal lesions. RESULTS: Two patients discontinued HBO after a few sessions and did not complete treatment. Eight patients completed at least 30 HBO sessions and were evaluable. At the end of the procedure, six of eight patients treated were healed, three completely and three partially. All patients

who healed completely received HBO as an additional treatment to local perineal surgery. CONCLUSION: HBO might be useful as a last resort treatment of chronic perineal Crohn's disease, resistant to other treatments or as a complement to surgery.

Closure of refractory perineal Crohn's lesion. Integration of hyperbaric oxygen into case management.

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A case is reported in which a comprehensive program of hyperbaric oxygen (HBO), surgical debridement and reconstruction, and continuing medical management resulted in complete and sustained closure of an extensive perineal Crohn's lesion refractory to conventional medical and surgical management. It is emphasized that in this case healing occurred in the setting of previous removal of all diseased intestinal tissue and only with the combined use of all three treatment modalities. HBO may be a useful adjunct in the therapy of large nonhealing perineal lesions post-proctocolectomy in patients who are unresponsive to metronidazole or to immunosuppressant therapy or who experience limiting side effects from continued medical therapy.

Healing of severe perineal and cutaneous Crohn's disease with hyperbaric oxygen.

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Recurrent perineal Crohn's disease can be an extremely debilitating complication that may be difficult to treat. We report a patient with progressively worsening perineal and biopsy-proven cutaneous Crohn's disease that had been refractory to surgery and medical treatment (sulfasalazine, steroids, 6-mercaptopurine, metronidazole, antibiotics). As the lesions were reminiscent of problem wounds occurring in other situations, hyperbaric oxygen treatment was instituted while the patient was continued on metronidazole. Response was dramatic with almost immediate relief of symptoms and regression within 2.5 mo of wounds that had previously defied therapy for 8 yr. Clinical remission has not been sustained as four subsequent courses of hyperbaric oxygen have been given over a period of 11 mo. However, the patient has been essentially asymptomatic since her initial course and the extent of her cutaneous disease has been minimal compared with that before hyperbaric oxygen. Hyperbaric oxygen treatment is costly and should not be routinely used in every patient with perineal Crohn's disease. However, this case report may herald an advance in the understanding of the pathogenesis of this complication and ultimately, its therapy.

Pneumatosis cystoides intestinalis following steroid treatment in a nephrotic syndrome patient: report of a case

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Pneumatosis cystoides intestinalis (PCI) is a relatively rare, benign condition characterized by multiple subserosal or submucosal gas-filled cysts in the bowel wall. The cause and incidence of PCI are uncertain, but the condition is most commonly diagnosed in patients who have chronic obstructive pulmonary disease, gastrointestinal disease (e.g. Crohn's disease, peptic ulcer disease) or collagen disease (e.g. scleroderma, systemic lupus erythematosus). The report of PCI associated with nephrotic syndrome has not be known as far as we have referred. We first experienced a case of PCI with nephrotic syndrome. The patient was a 28-year-old female who had developed nephrotic syndrome in 1977. Although she had been treated by steroid since the onset of the nephrotic syndrome, she was a frequent relapser. She was hospitalized to our hospital on November 1988, due to fourth relapse of the disease. The increasing dosage of steroid (60mg/day) improved general edema and decreased urinary protein, but abdominal pain and fullness occurred seven weeks after the admission. The abdominal radiographs showed air accumulations in the wall of the intestine (probably right sided colon) and

retroperitoneum. That finding was confirmed by Barium enema and abdominal computed tomography. We diagnosed the lesions as PCI from the above findings, and high flow oxygen and hyperbaric oxygen therapy improved the symptom of PCI. The etiology of PCI in this case was thought to be mainly a long term steroid treatment.

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