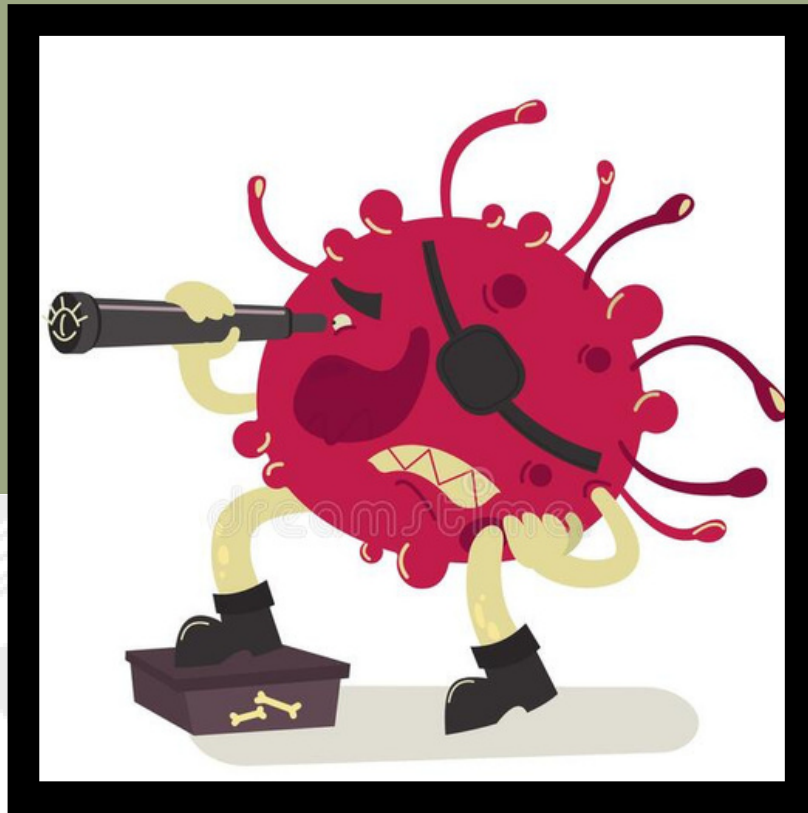


THE NORTHWEST WELLBEING HUB



HYPERBARIC OXYGEN THERAPY **CANCER**

KEY POINTS

- Increased oxygenation
- Improved wound healing
- Reduction of radiation-induced side effects
- Management of radiation necrosis
- Antibacterial effects and osteoradionecrosis prevention

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CANCER

1. **Increased oxygenation:** HBOT involves breathing pure oxygen in a pressurized chamber, leading to increased oxygen levels in the bloodstream. Tumors often have poor blood supply and are characterized by a low-oxygen (hypoxic) environment. HBOT can help overcome this by delivering high concentrations of oxygen to the tissues, potentially enhancing the effectiveness of radiation therapy and certain chemotherapy drugs that require oxygen to work optimally.
2. **Improved wound healing:** Cancer patients may experience delayed wound healing, particularly after surgical procedures or radiation therapy. HBOT promotes tissue regeneration and angiogenesis (formation of new blood vessels), which can aid in wound healing and reduce the risk of complications such as infections.
3. **Reduction of radiation-induced side effects:** Radiation therapy is a common treatment modality for cancer, but it can cause side effects such as tissue damage and radiation-induced fibrosis. HBOT has been shown to reduce these side effects by promoting tissue repair and reducing inflammation. It can help alleviate radiation-induced pain, promote healing, and improve the overall quality of life for individuals undergoing radiation therapy.
4. **Management of radiation necrosis:** In some cases, radiation therapy can lead to the development of radiation necrosis, which is the death of healthy tissue surrounding the treated area. HBOT has shown promise in managing radiation necrosis by improving oxygenation and blood flow to the affected tissues. This can help alleviate symptoms and potentially halt the progression of necrosis.
5. **Antibacterial effects and osteoradionecrosis prevention:** HBOT has antimicrobial properties and can help fight certain types of infections. In cancer patients, particularly those who have received radiation therapy to the head and neck region, HBOT can be beneficial in preventing or managing osteoradionecrosis. Osteoradionecrosis is a condition characterized by the death of bone tissue, and HBOT can promote bone healing and reduce the risk of infection in these cases.



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