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## P-09 HYPERBARIC OXYGEN THERAPY FOR CERVICAL NECROTIZING FASCIITIS OF ODONTOGENIC ORIGIN IN A HEALTHY YOUNG PATIENT

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### **Background:**

Necrotizing fasciitis (NF) is a severe soft tissue infection and can progress rapidly. It's predominantly seen in extremities, perineal area and abdominal wall. Occurrence in cervical area is uncommon and is usually related to dental infections. Aggressive treatment should be initiated promptly to overcome high mortality and morbidity. Adjunctive hyperbaric oxygen therapy has been shown to be beneficial in the management of NF.

### **Methods:**

A cervical necrotizing fasciitis case treated in our hyperbaric oxygen therapy unit is presented.

### **Case:**

A 33-year old healthy female patient had a story of right side neck swelling and erythema one day after a tooth extraction. She presented to the hospital with pus drainage from the right mandibular area and was diagnosed with cervical NF. The involved area was debrided and intravenous antibiotherapy was started at the Ear Nose and Throat Department. She was referred to our center and HBO was initiated immediately. Hyperbaric oxygen therapy was applied at 2.4 ATA for 120 minutes. The patient improved quickly with wound care, antibiotherapy and HBO. When appropriate granulation tissue grew, split thickness skin graft was applied. She was discharged on the 32nd day.

### **Discussion:**

Cervicofacial NF is commonly seen in immunocompromised patients and related to dental pathologies. Pain may be the only symptom at early stages and tissue necrosis may occur on the 4-5th day. Mediastinitis, pleural empyema and septic shock may develop and cause severe morbidity or mortality. Aggressive debridement and intravenous antibiotherapy are the first line treatments. Patients usually need repeated debridements. Adjuvant HBO has been shown to decrease mortality, hospitalization time and need for debridements in these patients. In our case, further tissue necrosis did not develop and additional debridement was not needed after HBO was started. HBO treatment is beneficial in the management of cervicofacial NF.

**Key words:** Cervicofacial necrotizing fasciitis, hyperbaric oxygen