

**ЮЗ-ЖАҒ ЖРРОҲЛИГИ, КАТТАЛАР ВА БОЛАЛАР**  
**ЖАРРОҲЛИК СТОМАТОЛОГИЯСИ**

**POST COVID-19 OSTEOMYELITIS ON UPPER JAW: DIAGNOSIS  
AND TREATMENT.**

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Many patients with mild or severe COVID-19 do not make a full recovery and have a wide range of chronic symptoms for weeks or months after infection, often of a neurological, cognitive or psychiatric nature. The epidemiological evidence, diagnostic criteria and pathogenesis of post-COVID-19 syndrome are reviewed.

Post covid osteomyelitis on upper jaw is a rare, life-threatening disorder that can complicate facial infection, sinusitis, orbital cellulitis, pharyngitis, or otitis or following traumatic injury or surgery, especially in the setting of a thrombophilic disorder. Early recognition of cavernous sinus thrombosis which, often presents with fever, headache, eye findings such as periorbital swelling, and ophthalmoplegia, is critical for a good outcome. Despite modern treatment with antibiotics and anticoagulation, the risk of long-term sequelae, such as vision, diplopia, and stroke, remains significant. This activity examines when cavernous sinus thrombosis should be considered, how to properly evaluate this condition and the role of the interprofessional team in caring for patients with this condition.

The optimal diagnostic test is neuroimaging with either contrast-enhanced computed tomography (CT) or magnetic resonance imaging (MRI). CT venogram (CTV) and contrast-enhanced MR venogram (MRV) are highly sensitive, whereas noncontrast CT and time-of-flight MRV may miss the diagnosis. Non-contrast CT of the head, although not ideal for a cavernous sinus thrombosis diagnosis, may reveal several subtle abnormalities such as engorgement or dilation of the superior and/or inferior ophthalmic veins, bulging of the lateral margins of the cavernous sinus, exophthalmos, and possibly the presence of sphenoid or ethmoid sinusitis, or mass lesions near the sphenoid or pituitary gland. Contrast-enhanced MRI brain shows bulging of the cavernous sinus, increased dural enhancement, and absent flow void is seen.

Screening for thrombophilia may give false results during anticoagulation therapy and should be delayed until after treatment is completed.

Because of the rarity of diagnosis, no randomized controlled trials are available, and expert opinion guides treatment. In general, antimicrobial and antithrombotic therapies are primary considerations.

Corticosteroids are often given but without demonstrated efficacy. The potential benefit would be decreased inflammation and vasogenic edema surrounding cranial nerves and orbital structures. Steroids are necessary, however, for cases of hypopituitarism. The International Study on Cerebral Veins and Dural Sinus Thrombosis (ISCVT) reported steroid use in 24% of cerebral thrombosis with no evidence of improvement.

No surgical interventions are recommended for the cavernous sinuses themselves. However, some patients might require sphenoidectomy, ethmoidectomy, maxillary antrostomy, mastoidectomy, abscess drainage, craniotomy (subdural empyema), orbital decompression, or ventricular shunt placement.

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## **USEFULLNESS OF LASER IN ORAL AND MAXILLOFACIAL SURGERY**

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### **Abstract**

Lasers have revolutionized dental treatment since three and a half decades of the twentieth century. Theodore Maiman in 1960 invented the ruby laser, since then laser is one of the most captivating technologies in dental practice. Lasers have been used in initial periodontal therapy, oral surgical procedures, and also in implant treatment. Further research is necessary so that laser can become a part of the dental armamentarium. This paper gives an insight towards the uses of laser in Oral and Maxillofacial Surgery.

### **Keywords**

Laser; Oral; Maxillofacial Surgery

### **Introduction**