

[July/August 2022 - Volume 33 - Issue 5](#)

- [Previous Abstract](#)
- [Next Abstract](#)

- **Cite**
  - 
  - 
  - 
  -
- **Share**
  - 
  - 
  - 
  -
- **Favorites**
- **Permissions**
- **More**
  - 
  -

## Clinical Studies

## Radiographic and Clinical Analysis of Cranio-Maxillofacial Complications of Cavernous Sinus Thrombosis Among 256 COVID-19 Patients

Shukhrat, Boymuradov A. PhD, DSc<sup>\*</sup>; Dar-Odeh, Najla BDS, FDS RCS<sup>†</sup>; Dilnoza, Bobamuratova T. PhD, MD<sup>\*</sup>; Dildora, Rustamova A. MD, PhD<sup>\*</sup>; Matluba, Khalmatova A. MD, PhD<sup>‡</sup>; Yokub, Kurbanov K. MD, PhD<sup>\*</sup>; Ravshan, Umarov Z. MD, PhD<sup>§</sup>; Gulbahor, Rakhmonova E. MD, PhD<sup>\*</sup>

[Author Information](#)

<sup>\*</sup>Tashkent Medical Academy;

<sup>†</sup> School of Dentistry, The University of Jordan, Amman, Jordan;

<sup>‡</sup>Tashkent State Dental Institute, Uzbekistan; and

<sup>§</sup>Tashkent Institute for Post-Graduate Medical Education, Uzbekistan.

Address correspondence and reprint requests to Bobamuratova T. Dilnoza, MD, PhD, Department of Otolaryngology and Dentistry of Tashkent Medical Academy, Republic of Uzbekistan; E-mail: [dbobamuratova@mail.ru](mailto:dbobamuratova@mail.ru)

All authors participated in the research process and data collection.

The authors report no conflicts of interest.

Supplemental digital contents are available for this article. Direct URL citations appear in the printed text and are provided in the HTML and PDF versions of this article on the journal's Web site ([www.jcraniofacialsurgery.com](http://www.jcraniofacialsurgery.com)).

The Journal of Craniofacial Surgery: [July/August 2022 - Volume 33 - Issue 5 - p 1549-1553](#)

doi: 10.1097/SCS.00000000000008680

- Buy
- SDC

Metrics

## Abstract

### Background:

A heavy burden of cranio-maxillofacial complications may be encountered in corona virus disease-2019 patients due to the associated coagulopathy and inflammatory consequences of the disease. This study aims to describe clinical and radiographic features of these complications in 256 patients who developed 1 or more of the following complications: cavernous sinus thrombosis, osteomyelitis or necrosis of the jaws.

### Methods:

Clinical assessment of cranial nerve function and general clinical assessment were performed. Imaging techniques used were multi-slice computed tomography, magnetic resonance imaging, and MRI with contrast enhancement.

### Results:

Thromboembolism of brain and facial blood vessels were associated with inflammation and necrosis. Multi-slice computed tomography/MR angiography showed thrombotic occlusions of the internal carotid artery in the area of the cavernous sinus, and in the ophthalmic veins. Cavernous sinus thrombosis was attributed to coagulopathy and, inflammation of the paranasal

sinuses, especially sphenoiditis. A noticeable increase in the size of the cavernous sinus was detected. Compression of the cranial nerves in the cavernous sinus (CS) region causes dysfunction and pathology in the corresponding regions.

Copyright © 2022 by Mutaz B. Habal, MD

^Back to Top



## Never Miss an Issue

Get new journal Tables of Contents sent right to your email inbox

## Browse Journal Content

- [Most Popular](#)
- [For Authors](#)
- [About the Journal](#)
- [Past Issues](#)
- [Current Issue](#)
- [Register on the website](#)
- [Subscribe](#)
- [Get eTOC Alerts](#)

## For Journal Authors

- [Submit an article](#)
- [How to publish with us](#)

## Customer Service

Live Chat

- [Activate your journal subscription](#)
- [Activate Journal Subscription](#)
- [Browse the help center](#)

- [Help](#)
- Contact us at:
  - EMAIL:  
[customerservice@lww.com](mailto:customerservice@lww.com)
  - TEL: (USA):  
TEL: (Int'l):  
800-638-3030 (within USA)  
301-223-2300 (international)



- [Privacy Policy \(Updated June 1, 2020\)](#)
- [Legal Disclaimer](#)
- [Terms of Use](#)
- [Open Access Policy](#)
- [Feedback](#)
- [Sitemap](#)
- [RSS Feeds](#)
- [LWW Journals](#)
  
- Copyright © 2022
- by Mutaz B. Habal, MD

This website uses cookies. By continuing to use this website you are giving consent to cookies being used. For information on cookies and how you can disable them visit our [Privacy](#) and [Cookie](#) Policy.

[Got it, thanks!](#)