Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
**Results:** 3D objects can be manipulated digitally or printed using 3D printers. They can be used to aid teaching, surgical planning and patient demonstrations.

**Conclusions:** 3D slicer is an easy to use software which should be in the surgeon's armamentarium. Awareness of the software and this technical note will allow its ubiquitous use by surgeons. This can help in surgical teaching, appreciation of surgical planning and anatomy. It has the potential to reduce cost and production time compared with outsourcing to outside companies. This software has already been shown to be used successfully in construction of in-house cutting guides for maxillofacial reconstruction. This will also create a next generation of surgeons who are familiar with software technology. Reducing the gap between surgeon and technology will help promote innovation and faster transition of technological advances into the operating room.

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**Nasopharyngeal COVID-19 Testing – Simple as ABC(SF Leak)?**
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**Introduction:** Routine nasopharyngeal swabbing for Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) testing for SARS-COV-2 (COVID-19) has become the recommended test for safely delivering both emergency and elective patient care. To date over 256 million tests have been conducted in the UK.

Whilst the advantages of routine COVID-19 swabbing are evident, it is important to acknowledge the associated common complications as well as unusual ones such as a Cerebrospinal Fluid (CSF) Leak.

**Methods:** We report a case of a 69-year-old female who underwent nasopharyngeal swabbing in preparation for routine elective surgery. At the 8-week follow up the patient complained of a runny nose, which was positive for Beta-2 Transferring thus confirming a CSF leak.

The likely area of concern for the CSF leak was in the region of the left fovea ethmoidalis where the bone was extremely thin with a solitary fluid filled air cell. The patient did later report right eye sur- gery 2 years previously which resulted in postoperative ethmoidal sinusitis managed with antimicrobials. This may have predisposed her to the CSF leak.

**Results:** Nasal swabbing has been shown to be the cause of a CSF leak in a handful of cases, only four thus far have been reported in the literature. This rare but important complication has a significant morbidity with risk of meningitis reaching 19 % in some reports.

**Conclusions:** It is the author's intention to raise awareness of CSF leak as a potential complication of COVID19. Swabbing to ensure these are recognised promptly and managed in a timely manner.

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**Best practice for the treatment of descending mediastinitis: A review of review articles and studies looking at cause, diagnosis, treatment and outcomes of head and neck descending necrotizing mediastinitis**
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**Introduction:** Descending necrotizing mediastinitis (DNM) is a rare but serious infection. The aim of this review is to highlight the common pathogens and risk factors associated with DNM as well as depicting both the medical and surgical treatments.

**Methods:** A literature search of the Cochrane libraries and PubMed libraries for articles published between January 2000 and December 2020 reporting on DNM were reviewed. The key words used: descending necrotizing mediastinitis, odontogenic infection, cervical infection. 3 surgeons evaluated 40 abstracts. Only literature reviews and studies were included.

**Results:** The total number of papers included were 14, 8 articles were reviews of the literature and 6 articles were original studies. Patient outcomes are better the earlier that the condition is diagnosed and treated. CT neck and thorax was the best imaging modality. Odontogenic with streptococcal species is most common cause and the most effective antibiotic sensitivity is a third-generation cephalosporin or clindamycin combined with metronidazole. An alternative is a penicillin with metronidazole. Prompt surgical management is required to effectively debride necrotic tissue. Airway management is an important consideration. Hyperbaric oxygen can be an useful adjunct to treatment.

**Conclusions:** Early treatment of descending mediastinitis is imperative for best outcome. Imaging of choice is a CT neck and thorax. Early broad-spectrum antibiotics and surgical intervention is key.

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**The stability of anterior open bite closure after Bi-maxillary osteotomy**
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**Introduction:** The aim of this study was to evaluate the long-term success rate of combined surgical-orthodontic therapy of skeletal anterior open bite.

**Methods:** 11 patients with an anterior open bite treated with a combined surgical-orthodontic therapy were retrospectively analysed via lateral cephalometric radiographs and models before treatment, 7–10 days after surgery(T1), one year post-operatively(T2) and two years post-operatively(T3).

**Results:** Ten patients continued to experience a positive over-bite at T2. This decreased to 8 at T3. Three patients experienced relapse and had a negative overbite at T3. The average pre-