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## Case Report

### Ludwig's Angina in a Patient Under Quarantine for Covid-19

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Ludwig's angina was first described in 1836 by Wilhelm Friedrich von Ludwig, a German physician, as a rapidly and frequently fatal progressive gangrenous cellulitis or necrotizing fasciitis involving the neck and the floor of the mouth<sup>[1]</sup>. Usual clinical features areodynophagia, oedema and trismus. Life-threatening complications of Ludwig's angina are mainly airway obstruction and septic choc, which need resuscitation measures with a specific airway management. The overall mortality of Ludwig's angina has been reported exceeding 50%<sup>[3]</sup>, decreasing to approximately 8% through appropriate management combining surgery, antibiotic therapy and resuscitation measures<sup>[2,3]</sup>. Surgery is considered as the most important part of the treatment, aiming to achieve debridement of infected areas, excision of necrotic tissue and drainage of pus<sup>[4]</sup>. Oral and maxillofacial surgery is correlated with a high risk of SARS-CoV-2 transmission. The main consideration during peak of the pandemic is to avoid unnecessary exposure to infected patients, it is mandatory that elective surgeries be rescheduled by case basis. Even urgent procedure may be delayed and alternative medical management has to be considered. Nevertheless, we as professionals cannot shrink away from procedures that warrant surgical management as the best available option. A 34 year old male transferred from a quarantine facility of a primary health care setup to a secondary level hospital, with a provisional diagnosis of dental abscess leading to pain and difficulty in swallowing. History revealed that the individual had a travel history abroad for bonafide duties. The individual developed pain in the lower right back region of jaw at the quarantine facility. He was administered oral broad spectrum antibiotics and analgesics. Later the individual was administered intravenous antibiotics however the signs and symptoms aggravated. On arrival at the secondary level quarantine set up he was clinically examined using personal protective equipment (PPE), which revealed gross swelling involving bilateral submandibular and submental spaces, hot potato voice, Severe trismus, raised tongue with difficulty in swallowing and platypnea [Figure-1]. Intraoral examination revealed grossly carious 48. A provisional diagnosis of Ludwig' angina secondary to periapical pathology with 48 was made and was taken up for debridement, incision and drainage under GA. Intubation was done by fibro-optic method [Figure-2]. Incision using Vazirani technique, incision were placed at submandibular area bilaterally and submentally, dissection was done to connect the incisions and corrugated rubber drain was placed [Figure-3]. The patient was shifted to makeshift ICU facility for 48 hrs. The individual was placed on empirical antibiotic therapy. The individual showed improvement in mouth opening and deglutition [Figure-4]. The individual is admitted in quarantine facility for the rest of the period. Ludwig's angina poses a emergency situation and poses a dilemma to the health care system in a quarantine/ isolation facility especially during the peak of pandemic.