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Figure 1. Upper lip swelling. Nasal tracheal intubation placement to protect the patient's compromised airway.



Figure 2. CT scan demonstrating severe bilateral facial subcutaneous infiltration, swelling, and fascia thickening.



Figure 3. Upper lip gangrene.

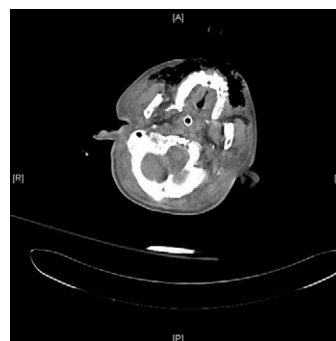


Figure 4. Follow-up CT scan showing bilateral facial soft tissue air. Used with permission of Hsien Yi Chen, MD, Emergency Department, Chang-Gung Memorial Hospital, Taoyuan, Taiwan.

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A 71-year-old man with decompensated liver cirrhosis presented to the emergency department with complaints of upper lip swelling and fever (body temperature 38°C [100.4°F]) and initially treated as angioedema. The patient was intubated the following day because of progressive and extensive upper lip, tongue, and right neck swelling (Figure 1). Noncontrast computed tomographic (CT) scan was performed on the same day (Figure 2). Continuous upper lip and right neck cutaneous gangrene developed within the next 4 days (Figure 3). Another CT scan was arranged (Figure 4).

*For the diagnosis and teaching points, see page 197.
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all authors have contributed to the final version. THR takes responsibility for the paper as a whole.

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DIAGNOSIS:

Facial necrotizing fasciitis. Necrotizing fasciitis is a rapidly spreading soft tissue bacterial infection causing superficial fascia and subcutaneous tissue necrosis. It predominantly involves the trunk, extremities, and genitalia and rarely affects the head and neck. Diabetes mellitus is the most common associated disease.¹ The involved area may be edematous and erythematous, with or without tenderness, possibly leading the physician to misdiagnose as signs of cellulitis or angioedema. Skin necrosis and crepitus usually develop late in the course of the disease. It may cause septicemia, upper airway obstruction, multiple organ failure, and eventual death if inadequately treated or diagnosed late. The use of a CT scan may aid in early diagnosis. Diffuse thickening and enhancement of subcutaneous fat, cervical fascia, and muscle may be seen on CT scan.² Soft tissue gas and fluids are present in only 55% to approximately 64% of cases.^{2,3} Early identification, radical surgical debridement, and broad-spectrum antibiotics are the keys to successful therapy.⁴

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