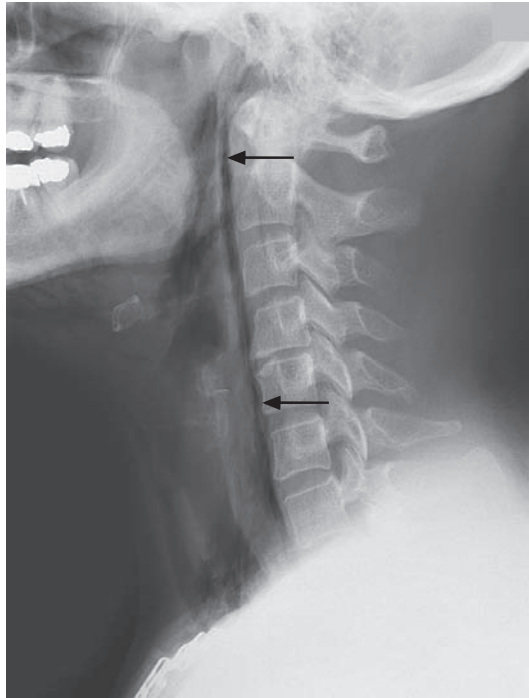


IMAGES IN CLINICAL MEDICINE

Prevertebral Emphysema after a Dental Procedure



A 47-YEAR-OLD WOMAN WITH DIABETES WAS SEEN IN THE EMERGENCY room with difficulty swallowing, bilateral chest pain, and a foreign-body sensation in her throat. Earlier that day, she had undergone a root canal under local anesthesia. Her symptoms were initially attributed to an allergic reaction to the anesthetic. Examination showed crepitus in her neck. A radiograph of the neck showed emphysema with prevertebral air in the cervical soft tissues. The likely mechanism for the introduction of air was injection by means of a high-speed dental drill through the soft tissue adjacent to the roots of the lower molars. Surgical procedures, especially those involving the lower third molar teeth, may confer a predisposition to the development of soft-tissue emphysema and even a fatal air embolism when air-cooled dental turbines are used. As this radiograph shows, the cervical prevertebral space (arrows) connects to the mediastinum, which may permit gas or microorganisms from the oral cavity to enter the mediastinum. This patient was monitored closely and had a spontaneous recovery.

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