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# PARAESTHESIA OF UPPER AND LOWER LIPS OF DENTAL ORIGIN —A CASE REPORT—

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PARAESTHESIA of the lower lip is well recognised as one of the symptoms of displaced fractures, extensive infections, and malignant neoplasms of the mandible. In the last-mentioned it is often the presenting symptom. Paraesthesia of areas of the skin of the cheek is likewise often associated with fractures of the maxillary complex, when there is disruption or compression of sensory nerves.

The following is a report of a case of unilateral paraesthesia of both the upper and lower lips resulting from infection of a maxillary third molar tooth.

### CASE REPORT

A negroid female, aged 40, sought treatment for a painful swelling of the left cheek associated with paraesthesia of the left side of the upper and lower lips of two days duration.

There was a moderate degree of swelling of the left cheek posterior to the zygomatic process of the maxilla and the left submandibular lymph nodes were slightly enlarged and tender.

The gingiva around the partially buried roots of the left maxillary third molar was inflamed and there was a small exudation of pus from the gingival margin. An intraoral radiograph did not reveal any striking changes in the bone surrounding the retained roots.

The condition was diagnosed as cellulitis in the infratemporal fossa and superficial facial 'space' resulting from spread of infection from an apical abscess of the retained maxillary third molar roots.

The roots were immediately removed and a three-day course of 0.5 gram

sulphadimethoxine twice a day was commenced.

The patient reported an improvement on the following day, and by the second day of treatment the swelling had entirely resolved and the paraesthesia of the lips had disappeared.

#### DISCUSSION

A search of the Index to Dental Literature for the past ten years has not brought to light any similar case report.

The inferior alveolar nerve lies approximately .75" postero-laterally to the maxillary tuberosity in the infratemporal fossa, while the maxillary nerve splits up into its major branches, including the infra-orbital nerve, about 1.0" superior to the apices of the maxillary third molar tooth in the pterygopalatine fossa (Figs. 1 and 2).

It can only be assumed that, having ruptured through the thin cortical plate of bone overlying the buried roots, the infection spread posteriorly into the infratemporal and superiorly towards the pterygopalatine fossae. The resulting oedema or cellulitis may have caused a certain amount of pressure on the nerves in these regions, resulting in the symptom of paraesthesia at their sensory endings.

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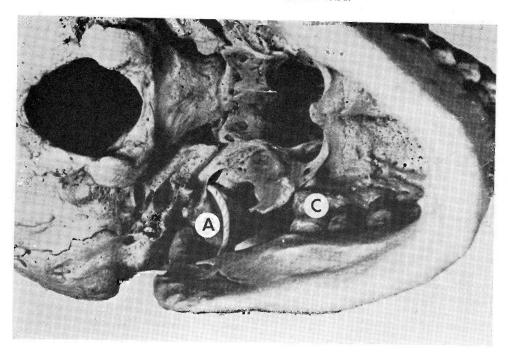
A question naturally arises: Why was there seemingly no involvement of the other nerves traversing the affected area?

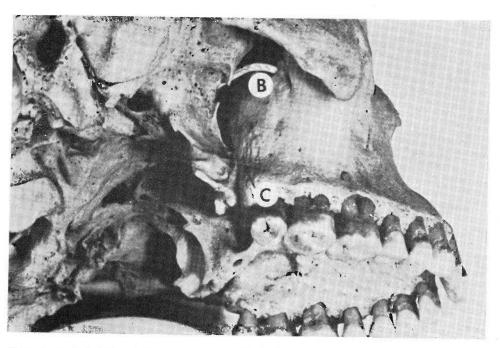
A possible explanation is that, whereas their sensitivity and great functional activity results in even a slight degree of paraesthesia of the lips being quickly noticed, the pain and tenderness associated with the cellulitis rendered the patient less conscious of minor degrees of paraesthesia of other branches of the maxillary and mandibular divisions of the trigeminal nerve.

Although not entirely satisfactory, the circumstances of the case appear to admit of no other explanation of the observed symptoms.

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Figs. 1 and 2. Inferior oblique and lateral oblique views of a skull. A and B are cords representing the inferior alveolar and the maxillary nerves. Note their relation to the maxillary tuberosity and maxillary third molar, C.

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