Section of Surgery

President—RODNEY MAINGOT, F.R.C.S.

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MEETING HELD AT THE ROYAL FREE HOSPITAL, GRAY'S INN ROAD, LONDON

Intra-oral Excision of the Submandibular Gland

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THE submandibular gland can be easily exposed through the mouth by incision of the mylohyoid muscle. One of the authors (D. D.) has frequently noted this during the operation of resection of the mylohyoid ridge as a surgical aid to the prosthetic problem of the atrophied lower alveolar ridge (Downton, 1954). This operation has been extended to the deliberate excision of the chronically inflamed salivary gland as an alternative to the standard cervical approach. The advantages of this technique are the avoidance of an external scar and of injury to the mandibular branch of the facial nerve.

The anæsthetic is administered by intranasal intubation and the throat packed as for any other intra-oral operation. In the edentulous patient, a curved incision is made through the mucoperiosteum along the alveolus from the retromolar pad to the canine region (Fig. 1). Where



FIG. 1.—Incision shown by dotted line.

molar teeth are present, the incision is carried round the lingual side of the necks of the teeth. The mucoperiosteum is reflected medially (Fig. 2). If the mylohyoid ridge is pronounced, it is removed with a chisel; otherwise the muscle is separated from its attachment to the mandible.

On retraction of the separated mylohyoid muscle, the submandibular gland is seen and the anterior portion exposed by blunt dissection. The gland is rendered more prominent by digital pressure applied beneath the lower border of the mandible by an assistant (Fig. 3). Delivery of the gland into the wound is usually easy, but occasionally inflammatory adhesions necessitate a more prolonged dissection.

When the body of the gland is seen, it is gripped with tissue forceps and pulled up through the incision. The loop of the facial artery is demonstrated by blunt dissection and can frequently be freed completely from the gland. Occasionally, however, it has been necessary to divide it between ligatures. The lingual nerve can be seen through the distal



FIG. 2.-Mucoperiosteal flap reflected.



FIG. 3.---Mylohyoid muscle divided.



FIG. 4.—Intra-oral delivery of gland.

part of the incision passing forwards and medially across the submandibular duct (Fig. 4). It is possible to follow the duct forward to its termination and remove it completely if necessary (Fig. 5).

When the molar teeth are present, the operation is a little more difficult and it is sometimes necessary to make a small cervical incision (2 cm) so that a finger can be inserted to give a greater upward pressure directly on the gland.

After the gland has been removed, the mucoperiosteal flap is sutured back loosely into place on to the mucoperiosteum of the alveolus with interrupted silk sutures. In the first 2 patients a drain was inserted, but in the remaining eight no drainage was instituted and post-operative infection occurred in 2 and had to be drained.

Post-operatively there has always been a hæmatoma in the submandibular space which has resolved within three or four days and one patient had paræsthesia lasting for three or four days along the side of the tongue due, probably, to contusion of the lingual nerve by retraction. These operations have been carried out under penicillin cover—1 mega unit of penicillin twice daily for five days.

All patients recovered quickly and were discharged from hospital within eight days and there was no damage to the mandibular branch of the facial nerve or to the hypoglossal nerve.

REFERENCE DOWNTON, D. (1954) Dent. Rec., 74, 212.

The following papers were also read:

- Recurrent and "Inoperable" Cancers.—Mr. H. DAINTREE JOHNSON.
- Melanoma in Relation to Pregnancy.—Miss P. A. GEORGE.



FIG. 5.—Showing calculus in duct; complete excision of gland.

- Plasma Glucuronidase Levels in Breast Cancer.— Mr. B. L. WHITAKER.
- Observations on Renal Homotransplantation.— Mr. R. Y. CALNE,
- Anatomy of the Finger Joints and the Position of Function.—Mr. R. L. G. DAWSON.
- Surgical Treatment of Acquired Heart Disease Utilizing the Pump Oxygenator.—Dr. C. W. LILLEHEI.

Clinical Cases and Specimens were demonstrated by the Surgical Staff of the Hospital.

The following demonstrations were given:

- A New Method of Stereotaxis.—Mr. A. M. H. BENNETT.
- Pituitary Ablation.—Mr. E. J. RADLEY SMITH and Mr. A. M. H. BENNETT.
- **Renal Response in Urinary Diversion.**—Mr. John Hopewell.
- **Electromyography in Nerve Injury.**—Department of Physical Medicine.
- Relations of the Recurrent Laryngeal Nerve. Department of Anatomy.
- Survey of Atheroma in the St. Pancras Area.— Department of Pathology.
- Exfoliative Cytology in Gastric Carcinoma.— Department of Pathology.
- **Portal Hypertension.**—The Medical Professorial Unit.
- Magnesium Deficiency in Gastro-intestinal Surgery.—Department of Chemical Pathology.