Postoperative salivary fistula: Therapeutic action of octreotide
To the Editors:

We report on a case of salivary fistula treated by octreotide (Sandostatin). A 71-year-old man with papillary carcinoma of the thyroid and massive metastases to the right laterocervical lymph nodes underwent total thyroidectomy and functional dissection of the affected nodes. The absence of an anatomic cleavage plane between a group of lymph nodes matted together in the high laterocervical region and the inferior pole of the parotid capsule (Figure) made limited resection of the gland necessary to resect the tumor. Fibrin sealant (2 ml) was applied to the sectioned surface to avoid formation of a salivary fistula. Permanent paralysis of the facial nerve unfortunately occurred as a result of injury to the facial nerve during resection of the parotid gland and adjacent metastatic thyroid cancer. About 80 ml of serosanguineous secretion was aspirated from the laterocervical drain on postoperative day 1 and 20 ml on postoperative day 2; on postoperative day 3 the drain was removed because there was no secretion. On postoperative day 4 we observed a soft subcutaneous mass, and its puncture revealed about 80 ml of pale yellow fluid with amylase concentration of 109 to 200 units/L. The patient was discharged on postoperative day 6. At home the subcutaneous swelling persisted; another drain was placed that aspirated from 30 to 40 ml of fluid daily, with elevated amylase concentrations (from 103 to 200 to 118 to 270 units/L). After 2 weeks, because of persistence of salivary secretion from the drain, treatment was started with octreotide (Sandostatin) 0.1 mg X 2/day subcutaneously. The discharge was clearly reduced after 1 day of treatment and ceased completely after day 10. The drain was removed and complete healing of the salivary fistula was achieved.

Salivary fistulas that result from trauma to the parotid gland during extraglandular surgical interventions, as in the present case, show meager tendency to heal spontaneously because of the actively secreting parotid tissue still present. The therapeutic use of octreotide for salivary fistulas has not yet been reported in the literature, but we decided to attempt such a treatment on the basis of some evocative observations: in fact, a reduction of salivary flow has been exhibited in human beings under pentagastrin stimulus after administration of somatostatin, although no decrease was detected in salivary amylase concentration. Also salivary somatostatin was first described in 1989; like other neuropeptides it occurs in the epithelium of the human salivary gland during gestation, where it possibly plays a role in the development of the sal-
Enlarged right laterocervical node adjacent lower edge of parotid gland is shown. A, Cranial section; B, caudal section.

Figure.