

## 論 文 要 旨

### 〔 Anatomy of the Lingual Nerve: Application to Oral Surgery 〕

下高原 理恵

The purpose of this research is to obtain morphological information about the traveling route, branching pattern, and distribution within the tongue of the lingual nerve, all of which are important for oral surgical procedure. Using 20 sides from 10 Japanese cadaveric heads, we followed the lingual nerve from its merging point with the chorda tympani to its peripheral terminal in the tongue. We focused on the collateral branches in the area before reaching the tongue and the communication between the lingual and hypoglossal nerves reaching the tongue. The collateral branches of the lingual nerve were distributed in the oral mucosa between the palatoglossal arch and the mandibular molar region. Two to eight collateral branches arose from the main trunk of the nerve, and the configuration of branching was classified into three types. More distally, the lingual nerve started to communicate with the hypoglossal nerve before passing the anterior border of the hypoglossus muscle. Nerve communications were also found in the main body and near the apex of the tongue. A thorough understanding of the collateral branches near the tongue, and the communication with the hypoglossal nerve inside the tongue, will help to prevent functional disorders from local anesthesia and oral surgical procedures associated with the lingual nerve.