Neurosensory disturbances one year after bilateral sagittal split mandibular ramus osteotomy performed with separators

J.P. Richard van Merkesteyn¹, Albert Zweers¹ and Johan E.M. Corputty²

¹Department of Oral & Maxillofacial Surgery (Chair: Prof. Dr. J.P.R. van Merkesteyn), Leiden University Medical Centre, Leiden, The Netherlands

²Department of Oral & Maxillofacial Surgery (Chair: Dr. Sri Angki Soekanto), Faculty of Dentistry, University of Indonesia, Jakarta

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Summary

Background

The most frequently performed osteotomy for correction of mandibular retrognathia is a bilateral sagittal split ramus osteotomy. Permanent neurosensory disturbance of the inferior alveolar nerve is one of the most frequently and severe complications. Many authors have reported this, but the incidence differs widely. In the recent literature, only four authors have reported a percentage of less than 10% after 1 year follow-up.

Objective

To determine the incidence of permanent neurosensory disturbance of the inferior alveolar nerve after bilateral sagittal split ramus osteotomy, and possible influences of the technique used.

Patients and methods

A series of 109 patients is reported who underwent a bilateral sagittal split mandibular ramus osteotomy with the use of separators and without the use of chisels. The segments were hold by rigid transbuccal screw fixation.
Results

The incidence of neurosensory disturbances 1 year after surgery was 8.3%.

Conclusion

The use of sagittal split separators without the use of chisels, may play an important role in the relatively low percentage of persistent hypoaesthesia of the inferior alveolar nerve.

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