

## INTISARI

Rekonstruksi pasca hemimandibulektomi diperlukan untuk mengatasi permasalahan kontur wajah, oklusi dan *oral competence*. Ketepatan lengkung dan adaptasi plat rekonstruksi yang baik sebagai pengganti tulang mandibula yang hilang merupakan kunci keberhasilan rekonstruksi. *Plate positioning guide* (PPG) dibutuhkan untuk mentransfer posisi plat rekonstruksi dari model anatomis mandibula 3 dimensi ke pasien secara akurat. Tujuan penelitian ini adalah untuk mengetahui kesimetrisan jaringan lunak sepertiga wajah bawah pasca rekonstruksi hemimandibulektomi menggunakan PPG.

Dua belas subjek pasca rekonstruksi hemimandibulektomi Tahun 2014-2019 sesuai kriteria yang telah ditentukan dipanggil ulang, terdiri dari kelompok PPG dan non PPG masing-masing 6 subjek. *Microscribe G2 desktop digitalizing systems* (0,005'' RS-232C, US) digunakan untuk pengukuran kesimetrisan jaringan lunak sepertiga wajah bawah dalam arah 3 dimensi. Uji kesimetrisan antara sisi yang direseksi dan sisi normal menggunakan *one sample test* (*test value*: 0,01). Kesimetrisan antara kelompok PPG dan non PPG dibandingkan menggunakan *fisher exact probability test*.

Penggunaan PPG menunjukkan jumlah subjek simetris antara sisi yang direseksi dan sisi normal (83,33%) lebih banyak dibandingkan tanpa PPG (0%). Perbedaan kesimetrisan jaringan lunak sepertiga wajah bawah yang signifikan ditemukan antara kelompok PPG dan non PPG ( $p = 0,015$ ). Penggunaan PPG bermanfaat untuk mendapatkan jaringan lunak sepertiga wajah bawah yang lebih simetris pada rekonstruksi hemimandibulektomi dibandingkan tanpa PPG.

Kata kunci: hemimandibulektomi, *plate positioning guide* (PPG), kesimetrisan jaringan lunak sepertiga wajah bawah

## **ABSTRACT**

*Post hemimandibulectomy reconstruction is required to overcome facial contour problems, occlusion and oral competence. The accuracy of the curve and good adaptation of the reconstructive plate in place of the lost mandibular bone were the keys to successful reconstruction. A plate positioning guide (PPG) is required to transfer the reconstructive plate position from a 3-dimensional anatomical model of the mandible to the patient. The aim of this study was to determine the soft tissue symmetry of the lower third of the face after hemimandibulectomy reconstruction using PPG.*

*Twelve subjects after hemimandibulectomy reconstruction in 2014-2019 according to predetermined criteria were recalled, consisting of 6 subjects PPG and non PPG each. The Microscribe G2 desktop digitalizing system (0,005'' RS-232C, US) was used to measure the soft tissue symmetry of the lower third of the face in 3-dimensional direction. Symmetry test between the resected side and the normal side used one sample test (test value: 0,01). Symmetry between the PPG and non-PPG groups was compared using the fisher exact probability test.*

*The use of PPG showed the number of subjects symmetrical between the resected side and the normal side (83,33%) more than without PPG (0%). A significant difference in soft tissue symmetry of the lower third of the face was found between the PPG and non-PPG groups ( $p = 0,015$ ). The use of PPG is useful for obtaining a more symmetrical lower third soft tissue in hemimandibulectomy reconstruction than without PPG.*

*Key words: hemimandibulectomy, plate positioning guide (PPG), soft tissue symmetry of the lower third of the face*