CONCLUSION: Objective breast measurements quantifying volume, shape, and surface area continue to be important to ensure great aesthetic outcomes in breast surgery. Conventional methods to identify the location of the new NAC do not account for differences in breast width and projection, which could lead to NAC that are not leveled. In our experience, the use of the laser level has been a great addition to our armament to ensure NAC symmetry during breast surgery. The application of leveling tools is not limited only to breast surgery as they have also been used successfully in other procedures such as: abdominoplasty, TRAM flaps, and scar revisions.

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The Use of Wave Shaped Bone Supported Arch Bars in the Treatment of Mandibular Fractures

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BACKGROUND: Maxillomandibular fixation (MMF) with stainless steel Erich arch bars or intermaxillary screws has traditionally been the cornerstone of the treatment of mandibular fractures. Nonetheless, several well-documented disadvantages persist including intraoperative wire-stick injuries, poor oral hygiene maintenance, and increased operative time. Hybrid systems using bone supported arch bars have therefore been proposed as an alternative to address these issues. The newest addition is the Matrix Wave MMF system that features wave-shaped bone supported arch bars with locking screws. This study illustrates our experience with this novel system in the treatment of mandibular fractures.

METHODS: Two patients with mandibular fractures were treated with the new Matrix Wave MMF system. The first patient presented with a parasympyseal fracture on the right side and an angle fracture on the left. The second patient had a nondisplaced right mandibular body fracture and a left ramus and coronoid process fracture. The arch bars were contoured, fitted and secured using 6mm screws. The malleable arch bar was either stretched or compressed to ensure optimal positioning. 24-gauge interdental fixation wiring was placed using the fish loop technique and transverse 24-gauge wires were fashioned on either side of the fracture to achieve compression and relative fixation about this point.

RESULTS: Patients were retained in MMF until there was stable occlusion and clinical evidence of healing. Oral hygiene was unproblematic and there were no intraoperative wire-stick injuries with insertion of the system. Post-operative Panorex scans did not reveal any evidence of damage to tooth roots. None of the screws became embedded in the mucosa secondary to overgrowth; the arch bars were successfully removed in an outpatient setting without local anesthesia.

CONCLUSIONS: The malleability of the bone supported arch bar allows for optimal screw placement and robust compression. Moreover, the self-drilling, locking screws sit above the plate to provide additional anchor points for bridge wires to better approximate fracture segments. In our experience, this novel hybrid system minimizes the drawbacks associated with traditional MMF techniques and offers a viable alternative for closed fixation of mandibular fractures.

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Therapeutic Strategy of Mandibular Condylar Fractures – Usefulness of the Combination of Open Reduction and Dynamic Distraction Treatment

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PURPOSE: Although condyle is one of the frequent site of fracture in the mandible¹, anatomical and functional complexity of the temporomandibular joint (TMJ) make the treatment policy of mandibular condyle fracture controversial.²,³ Watanabe et al. reported a novel treatment for mandibular condylar fractures: a dynamic distraction treatment.⁴ This application of a dynamic internal distraction device is an effective and minimally invasive treatment; however, in our substantial experience on dynamic distraction treatment, we occasionally encounter rare cases in which resulted insufficient reduction of the fractured bony fragments. The purpose of this study is to investigate our clinical cases retrospectively, and establish a novel therapeutic strategy of mandibular condyle fracture.

METHODS: The subjects were 55 cases who underwent condylar fracture treatment in 2006–2014. In reference to the Spiessl classification, cases were classified depend on the site of fracture (intra-articular or extra-articular) and the location of the fractured fragment (no change, dislocation or displacement). Clinical outcomes were evaluated with regard to TMJ function and occlusion.

RESULT: Ten cases were treated by means of ORIF, 31 cases by dynamic distraction treatment, 2 cases by combination of ORIF and dynamic distraction treatment, and 12 cases by conservative therapy. The mean operative duration of ORIF was over six hours, and in some cases of intra-articular fracture, completion of surgery was impossible and discontinued. Dynamic distraction treatment worked well in most cases, however, in some cases with displacement of large bony fragments, only modest reduction was obtained and long period was needed to recovery of the TMJ. In such cases, combination of ORIF and dynamic distraction treatment achieved better outcomes. Conservative therapy was performed only when location of the fractured fragment was not changed.

DISCUSSION: Dynamic distraction treatment is very effective when fractured fragment is not large (intra-articular fracture; Type VI) or the bone fragment remains within dislocation (Type IV, V). For extra-articular fracture with displacement of bony fragment (Type II, III), ORIF can be the choice, however, combination of ORIF and dynamic distraction treatment which can avoid plate fixing and thus be less-invasive may be more preferred by many surgeons.

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Venous Thromboprophylaxis And Monitoring The Changes In Venous Pressure In Transferred Tissues After Free Flap Reconstruction By Placing A Catheter In The Vein

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BACKGROUND: In free flap reconstruction after limb injury, venous thrombosis often becomes a problem.¹ Although persistent perfusion techniques have been used to monitor the changes in venous pressure in transferred tissue, there has been no technique designed for venous thromboprophylaxis. The authors have devised a persistent perfusion technique that can be used in the vein of transferred tissue to flush intravenous clots while simultaneously monitoring changes in venous pressure.