Tkachenko E. V.

Candidate of Medical Sciences, Assistant

Khalafalla Ahmed

Student

Ukrainian Medical Stomatological Academy Poltava, Ukraine

LEADING EXTREMITY INFLUENCE ON MANDIBULAR FRAC-TURES DISTRIBUTION IN HSEEU «UMSA» UKRAINIAN STUDENTS

Ethnic aspect is described together with superior-inferior asymmetry in part in the work about pharyngeal airways usage at different orthognathic procefor mandibular vascularization dures [3, p. 110-118], constructs [14, p. 1028-1032], pH influence on composite materials [21, p. 9-13], overdenture retaining by symphyseal single implant [15, p. 4-8]. Also there exists an evaluation of the accuracy of computer-guided mandibular fracture reduction [7, p. 1587-1591]. Chewing efficiency and electromyographic activity of masseter muscle with three designs of implant-supported mandibular overdentures was assessed and compared by Egyptian dentists in Mansoura university [12, p. 742-748]. We met two works about comparison between threedimensional and standard miniplates in the mandibular angle fractures management [6, p. 316-321; 4, p. 708-716]. On the contrary, one work is dedicated to one miniplate comparison with two in the fixation of isolated fractures of the mandibular angle [2, p. 690-698].

Ethnic aspect is described also with right-left asymmetry of maxillary-facial area as a whole and oral cavity asymmetry in part. Egyptian dentists performed management of bilateral ankylosis [10, p. 96–103], condyles replacement with costochondral grafts at temporomandibular joint unilateral and bilateral ankylosis [17, p. 118–122], unilateral temporomandibular ankylosis [9, p. 109–115].

The bilateral sagittal split osteotomy, one of the main orthognathic surgery procedures used for managing skeletal mandibular excess, deficiency or asymmetry as well as for good recovery of the maximal incisival opening is paid attention in Egypt [1, p. 195–203]. Although vertical and antero-posterior positions of condyle are assessed also together with the medio-lateral one that is why three asymmetries are evaluated in this work. Methods for unilateral man-

dibular angle fractures postoperative complications minimization are also in the focus of the Egyptian dentists [5, p. 2197–2211].

Asymmetry is described often in ethnic-gender typological aspect. According to the work [16, p. 5–8] of Egyptian and Saudi dentists the implant retained overdenture with the median lingualized occlusal scheme may be recognized as being acceptable according to the general implant success rates and criteria in males. We met a work about marginal bone loss adjacent to conventional and immediate loaded two implants supporting a ball-retained mandibular overdenture in men and women [13, p. 496–503].

Asymmetry is also described in a complex of ethno-age typological aspect. We met a work about marginal bone resorption at mandible implanting in 59,6-yeared edentulous patients [11, p. 608–618]. There is an investigation touching bimaxillary surgery of longstanding unilateral temporomandibular joint ankylosis (appearing in childhood) in the adults and in children [8, p. 12–18].

Asymmetry can be reflected together with ethno-gender-age aspect. Egyptian and Saudi dentists proposed simultaneous maxillary-mandibular distraction osteogenesis in 18-yeared men and women to correct facial asymmetry in patients with hemicraniofacial microsomia and those with facial deformity after temporo-mandibular joint ankylosis [20, p. 471–477; 19, p. 471–477]. Egyptian dentists performed intraoral distraction osteogenesis for the correction of facial deformities following temporomandibular joint ankylosis in men and women aged 14–35 (mean 19) [18, p. 399–406].

Our examination object was 21 student from UMSA dental faculty with mandibular angular fracture hospitalizing in Poltava Regional Hospital.

As the results demonstrated right-handers had right-sided mandibular fractures, left-handers – left-handed while ambidexters – on the middle line.

Our results suggested that dominant extremity influences on pathologic process side in the dental patients in part with mandibular angular fractures.

REFERENCES LIST

- 1. Abdel-Moniem Barakat A. Clinical and radiographic evaluation of a computer-generated guiding device in bilateral sagittal split osteotomies / A. Abdel-Moniem Barakat, A. Abou-ElFetouh, M.M. Hakam, H. El-Hawary, K.M. Abdel-Ghany // J Craniomaxillofac Surg. 2014 Jul. Vol. 42, N. 5. P. 195–203.
- 2. Al-Moraissi E.A. One miniplate compared with two in the fixation of isolated fractures of the mandibular angle / E.A. Al-Moraissi // Br J Oral Maxillofac Surg. 2015 Oct. Vol. 53, N. 8. P. 690–698.

- 3. Al-Moraissi E.A. Impact on the pharyngeal airway space of different orthognathic procedures for the prognathic mandible / E.A. Al-Moraissi, S.M. Al-Magaleh, R.A. Iskandar, E.A. Al-Hendi // Int J Oral Maxillofac Surg. 2015 Sep. Vol. 44, N. 9. P. 110–118.
- 4. Al-Moraissi E.A. Three-dimensional versus standard miniplate fixation in the management of mandibular angle fractures: a systematic review and meta-analysis / E.A. Al-Moraissi, T.M. El-Sharkawy, T.I. El-Ghareeb, B.R. Chrcanovic // Int J Oral Maxillofac Surg. 2014 Jun. Vol. 43, N. 6. P. 708–716.
- 5. Al-Moraissi E.A. What method for management of unilateral mandibular angle fractures has the lowest rate of postoperative complications? A systemic review and meta-analysis / E.A. Al-Moraissi, E. Ellis 3rd // J Oral Maxillofac Surg. 2014 Nov. Vol. 72, N. 11. P. 2197–2211.
- 6. Al-Moraissi E.A. Comparison between three-dimensional and standard miniplates in the management of mandibular angle fractures: a prospective, randomized, double-blind, controlled clinical study / E.A. Moraissi, R.M. Mounair, T.M. El-Sharkawy, T.I. El-Ghareeb // Int J Oral Maxillofac Surg. 2015 Mar. Vol. 44, N. 3. P. 316–321.
- 7. El-Gengehi M. Evaluation of the Accuracy of Computer-Guided Mandibular Fracture Reduction / M. Gengehi, S.A. Seif // J Craniofac Surg. 2015 Jul. Vol. 26, N. 5. P. 1587–1591.
- 8. el-Sheikh M.M. Temporomandibular joint ankylosis : the Egyptian experience // Ann R Coll Surg Engl. 1999 Jan. Vol. 81, N. 1. P. 12-18.
- 9. el-Sheikh M.M., Medra A.M. Management of unilateral temporomandibular ankylosis associated with facial asymmetry // J Craniomaxillofac Surgery. 1997 Jun. Vol. 25, N. 3. P. 109–115.
- 10. el-Sheikh M.M., Medra A.M., Warda M.H. Bird face deformity secondary to bilateral temporomandibular joint ankylosis // J Craniomaxillofac Surg. 1996. Vol. 24, N. 2. P. 96–103.
- 11. Elsyad M.A. Marginal bone resorption around immediate and delayed loaded implants supporting a locator-retained mandibular overdenture. A 1-year randomized controlled trial / M.A. Elsyad, E.A. Elsaih, A.S. Khairallah // J Oral Rehabil.-2014 Aug. Vol. 41, N. 8-P. 608-618.
- 12. Elsyad M.A. Chewing efficiency and electromyographic activity of masseter muscle with three designs of implant-supported mandibular overdentures. A cross-over study / M.A. Elsyad, S.A. Hegazy, N.I. Hammouda, G.Y. Al-Tonbary, A.A. Tabib // Clin Oral Implants Res. 2014 Jun. Vol. 25, N. 6. P. 742–748.
- 13. Elsyad M.A. Marginal bone loss adjacent to conventional and immediate loaded two implants supporting a ball-retained mandibular overdenture: a 3-year

- randomized clinical trial / M.A. Elsyad, Y.F. Al-Mahdy, M.M. Fouad // Clin Oral Implants Res. 2012 Apr. Vol. 23, N. 4. P. 496–503.
- 14. Eweida A.M. Axially vascularised mandibular constructs: Is it time for a clinical trial? / A.M. Eweida, R.E. Horch, Marei M.K., H.A. Elhammady, A.N. Etaby, A.S. Nabawi, M.F. Sakr // J Craniomaxillofac Surg. 2015 Sep. Vol. 43, N. 7. P. 1028–1032.
- 15. Ismail H.A. Two Years Retrospective Evaluation of Overdenture Retained by Symphyseal Single Implant Using Two Types of Attachments / H.A. Ismail, A.I. Mahrous, F.H. Banasr, T.A. Soliman, Y. Baraka // J Int Oral Health. 2015 Jun. Vol. 7, N. 6. P. 4—8.
- 16. Ismail H.A. Clinical and Radiographic Evaluation of Median Lingualized Occlusion in Implant Retained Mandibular Complete Overdenture / H.A. Ismail, S.A. Yousief, A.I. Mahrous, A.A. Shaban, S.N. Azzeghaiby, D. Aljehani // J Int Oral Health. 2015. N. 7 (Suppl 1). P. 5–8.
- 17. Medra A.M. Follow up of mandibular costochondral grafts after release of ankylosis of the temporomandibular joints // Br J Oral Maxillofac Surg. 2005. Vol. 43, N. 2. P. 118–22.
- 18. Sadakah A.A. Intraoral distraction osteogenesis for the correction of facial deformities following temporomandibular joint ankylosis: a modified technique / A.A. Sadakah, R.F. Elgazzar, A.I. Abdelhady // Int J Oral Maxillofac Surg. -2006 May. Vol. 35, N. 5. P. 399–406.
- 19. Shehata E.A.A. Modified bimaxillary distraction osteogenesis: A technique to correct facial asymmetry / E.A.A. Shehata, A.M.M. Medra // Br J Maxillofac Surg. 2006. V. 45. P. 471–477.
- 20. Shehata E.A. Modified bimaxillary distraction osteogenesis: a technique to correct facial asymmetry / E.A. Shehata, A.M. Medra // Br J Oral Maxillofac Surg. 2007 Sep. Vol. 45, N. 6. P. 471–477.
- 21. Soliman T.A. In Vitro Solubility and Wear Rates of Silorane and Dimethacrylate Resin Based Composite Restorative Materials under Different pH Conditions / T.A. Soliman, K.M. Tubaigy, E.M. Raffat, E.I. Al-Agha // J Int Oral Health. 2015. N. 7 (Suppl 1). P. 9–13.