EDITORIAL

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Establishment of a new health insurance procedure code for oral and maxillofacial bone graft in Republic of Korea

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Bone graft procedure in the oral and maxillofacial area has been created as an insurance benefit in Republic of Korea since August 1st, 2023 (Ministry of Health and Welfare Notification No. 2023-133 and 2023-147)[1,2]. This code of the bone graft is applicable to (1) the jawbone defects for intra-bony pathological lesions (tumors, cysts), (2) the bony defects in congenital maxillofacial deformities which need treatment, (3) the maxillofacial fracture cases where impaired healing of the bony fragment is anticipated. Notably, the bone graft procedures for the purpose of (1) facial esthetics, (2) orthodontics, (3) dental prosthetics, and (4) dental implants are not eligible for insurance benefit. Nonetheless, the establishment of a new dental procedure code for the oral and maxillofacial bone grafting is most welcome to dental health professionals, which had been proceeded for over 10 years with the cooperation of the Insurance Bureau of the Korean Dental Association, led by the Insurance Department of the KAOMS (Korean Association of Oral and Maxillofacial Surgeons) and the KAMPRS (Korean Association of Maxillofacial Plastic and Reconstructive Surgeons).

Korean medical insurance previously covered a single bone graft procedure, which was for the alveolar bone defect in periodontal surgery (Cha-107)[3]. Application of this code was limited to the alveolar bone part, which resulted in no appropriate code for maxillofacial bone graft surgery, such as for the basal bone in maxilla and mandible. Therefore, most of the insurance claims for maxillomandibular bone graft have been cut down frequently which were mostly made by oral and maxillofacial surgeons. In addition, the size of alveolar bone defect in periodontal surgery is minor, so the amount of bone graft materials allowed for insurance benefit was limited to 3 cc (2.5 g) in maximum[4]. Mechanistically, such an amount is insufficient for the maxillofacial bony defect where a significant amount of graft is necessary. These include jawbone defects originated from intra-bone cysts, tumors, trauma, and osteomyelitis. Unfortunately, there was no claimable procedure code of dental health insurance, so as a desperate measure, the medical procedure code Ja-31-1[3] "bone graft" was used alternatively. Despite these efforts, the insurance claim for Ja-31-1 was also cut down when it was applied for the maxillofacial bone graft and there were many cases where the bone substitute material could not be filled more than 3 cc.

The procedure code for the maxillorafial bone graft was generated and used for a long time in the United States (US). The inpatient procedure lists use the ICD-10-CM (International Classification of Diseases, 10th Revision, Clinical Modification); outpatient lists use CPT (Current Procedural Terminology), which is HCPCS (Healthcare Common Procedure Coding System) level I. Dentistry in US separately uses CDT (Current Dental Terminology), developed by the ADA (American Dental Association), officially known as Codes on Dental Procedures and Nomenclature, and included in Part D of HCPCS level II[5]. The CDT categorizes bone grafting as periapical defects (D3428, D3429), periodontal defects (D4263, D4264), peri-implant defects (D6103), ridge augmentation in edentulous areas (D7950), bone replacement grafting for ridge preservation (D7953), and repair of maxillofacial soft and/or hard tissue defects resulting from surgical trauma or congenital defects of the facial bones (D7955), maxillary sinus augmentation with bone or bone substitute through a lateral open approach (D7951), and sinus augmen-

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tation through a vertical approach (D7952), among others, are listed for defects of the maxillary and facial bones, as well as the alveolar bone[6].

Importantly, autogenous bone graft requires bone harvesting procedure. However, there is no specific comment about bone harvesting procedure in the new Notification. Therefore, in the case of bone grafting performed concurrently with autogenous bone harvesting, the ostectomy (Ja-31)[3] can be claimed as before. The CDT in US clearly specifies whether or not each procedure includes obtaining graft material[6]. For example, D7953 and D7955 do not include obtaining graft material. In addition, bone grafting in the oral and maxillofacial area has been using not only autogenous bone or allogeneic bone, but also various xenogeneic bone, synthetic bone[7], and autologous tooth-derived bone graft material[8], and these have been used alone or in combination[9]. It seems that this specificity of the use of bone graft materials should be clarified in the new Notification.

There is one thing to point out is the insurance policy for the bone graft in the patients over the age of 65 when they receive two dental implant covered by national insurance. The insurance coverage for bone grafting related in this case is recognized as non-reimbursement as before.

Since oral and maxillofacial bone grafting is a necessary procedure to provide better medical services to the patients, the newly generated code will be applied to higher number of patients in the future. Furthermore, application of this code will accompany the development of better bone graft materials and treatment protocols, resulting in improvement of patients' oral and maxillofacial health and even their systemic health.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

References

1. Ministry of Health and Welfare (MOHW). Ministry of Health and Welfare Notification No. 2023-133 [Internet]. Sejong: MOHW [cited 2023 Aug 15]. Available from: https://www.mohw.go.kr/react/jb/sjb0406vw.jsp?PAR_MENU_ID=03&MENU_ID=030406&page=2&CONT_SEQ=377248
2. Ministry of Health and Welfare (MOHW). Ministry of Health and Welfare Notification No. 2023-147 [Internet]. Sejong: MOHW [cited 2023 Aug 15]. Available from: https://www.mohw.go.kr/react/jb/sjb0406vw.jsp?PAR_MENU_ID=03&MENU_ID=030406&page=1&CONT_SEQ=377537
3. Health Insurance Review & Assessment Service (HIRA). Health insurance treatment benefit cost. HIRA; 2023.
4. Ministry of Health and Welfare (MOHW). Ministry of Health and Welfare Notification No. 2007-139 [Internet]. Sejong: MOHW [cited 2023 Aug 15]. Available from: https://www.mohw.go.kr/react/jb/sjb0406vw.jsp?PAR_MENU_ID=03&MENU_ID=030406&page=356&CONT_SEQ=320151
5. Korea Medical Record Association. A comparative study on the classification system of medical practices in foreign countries. Health Insurance Review & Assessment Service; 2013.
6. American Dental Association (ADA). ADA guide to graft material collection procedure reporting. ADA; 2021.
7. Ku JK, Hong I, Lee BK, Yun PY, Lee JK. Dental alloplastic bone substitutes currently available in Korea. J Korean Assoc Oral Maxillofac Surg 2019;45:51-67. https://doi.org/10.5125/jkaoms.2019.45.2.51
8. Li Y, Zhou W, Li P, Luo Q, Li A, Zhang X. Comparison of the osteogenic effectiveness of an autogenous demineralised dentin matrix and Bio-Oss® in bone augmentation: a systematic review and meta-analysis. Br J Oral Maxillofac Surg 2022;60:868-76. https://doi.org/10.1016/j.bjoms.2022.03.009
9. Aludden HC, Mordenfeld A, Hallman M, Dahlin C, Jensen T. Lateral ridge augmentation with Bio-Oss alone or Bio-Oss mixed with particulate autogenous bone graft: a systematic review. Int J Oral Maxillofac Surg 2017;46:1030-8. https://doi.org/10.1016/j.ijom.2017.03.008

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