

표 1. 치과 핵심질문 1 근거표

핵심질문 1

문헌정보	연구유형	대상자 수	문헌 질 KCIG
Boeddinghaus R, Whyte A. Current concepts in maxillo-facial imaging. Eur J Radiol 2008; 66:396-148	review		5
Caloss R, Atkins K, Stella JP. Three-dimensional imaging for virtual assessment and treatment simulation in orthognathic surgery. Oral Maxillofac Surg Clin North Am. 2007; 19: 287-309.	review		5
Cevidane LHS, Bailey LJ, Tucker GR, Styner MA, Mol A, Phillips CL, Proffit WR, Turvey T. Superimposition of 3D cone-beam CT models of orthognathic surgery patients. Dentomaxillofac Radiol 2005; 34: 369-375.	comparative study	10	2
Edwards SP. Computer-assisted craniomaxillofacial surgery. Oral Maxillofac Surg Clin North Am. 2010; 22: 117-134.	review		5
Enciso R, Memon A, Mah J. Three-dimensional visualization of the craniofacial patient: volume segmentation, data integration and animation. Orthod Craniofac Res 2003; 6 Suppl 1: 66-71; discussion 179-82.	case report		5
Hoffman GR, Islam S. The difficult Le Fort I osteotomy and downfracture: a review with consideration given to an atypical maxillary morphology. J Plas Reconstr Aesthet Surg 2008; 61: 1029-1033.	review		5
Metzger MC, Hohlweg-Majert B, Schwarz U, Teschner M, Hammer B, Schmelzeisen R. Manufacturing splints for orthognathic surgery using a three-dimensional printer. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2008; 105: e1-7.	technical report		5
Popat H, Richmond S, Drage NA. New developments in: three-dimensional planning for orthognathic surgery. J Orthod. 2010; 37: 62-71.	review		5
Quereshy FA, Savell TA, Palomo JM. Applications of cone beam computed tomography in the practice of oral and maxillofacial surgery. J Oral Maxillofac Surg 2008; 66: 791-796.	review		5
Swennen GRJ, Mommaerts MY, Abeloos J, De Clercq C, Lamoral P, Neyt N, Casselman J, Schutyser F. A cone-beam CT based technique to augment the 3D virtual skull model with a detailed dental surface. Int J Oral Maxillofac Surg 2009; 38: 48-57.	comparative study	10	2
Orentlicher G, Goldsmith D, Horowitz A. Applications of 3-dimensional virtual computerized tomography technology in oral and maxillofacial surgery: current therapy. J Oral Maxillofac Surg. 2010;68:1933-1959.	review		5
Tucker S, Cevidane LH, Styner M, et al. Comparison of	comparative	20	2

actual surgical outcomes and 3-dimensional surgical simulations. <i>J Oral Maxillofac Surg.</i> 2010;68:2412–2421.	study		
Cevidanes LH, Tucker S, Styner M, et al Three-dimensional surgical simulation. <i>Am J Orthod Dentofac Orthop.</i> 2010;138: 361–371.	technical report		5
Heymann GC, Cevidanes L, Cornelis M, De Clerck HJ, Tulloch JF. Three-dimensional analysis of maxillary protraction with intermaxillary elastics to miniplates. <i>Am J Orthod Dentofac Orthop.</i> 2010;137:274–284.	comparative study	6	3
Almeida RC, Cevidanes LH, Carvalho FA, et al. Soft tissue response to mandibular advancement using 3D CBCT scanning. <i>Int J Oral Maxillofac Surg</i> 2011;40:353–359.		21	2
Gateno J, Xia JJ, Teichgraeber JF. New 3-dimensional cephalometric analysis for orthognathic surgery. <i>J Oral Maxillofac Surg.</i> 2011;69:606–622.	review		5
Kim YI, Park SB, Son WS, Hwang DS. Midfacial soft-tissue changes after advancement of maxilla with Le Fort I osteotomy and mandibular setback surgery: comparison of conventional and high Le Fort osteotomies by superimposition of cone-beam computed tomography volumes. <i>J Oral Maxillofac Surg.</i> 2011;69:e225–e233.	comparative study	42	2
Lloyd TE, Drage NA, Cronin AJ. The role of cone beam computed tomography in the management of unfavourable fractures following sagittal split mandibular osteotomy. <i>J Orthod.</i> 2011;38:48–54.	case report	2	4
Swennen GR, Mollemans W, De Clercq C, et al. A cone-beam computed tomography triple scan procedure to obtain a threedimensional augmented virtual skull model appropriate for orthognathic surgery planning. <i>JCraniofac Surg.</i> 2009;20:297–307.	comparative study	10	4
Schendel SA, Lane C. 3D orthognathic surgery simulation using image fusion. <i>Semin Orthod.</i> 2009;15:48–56.	review		5
Ebner FH, Kürschner V, Dietz K, Bültmann E, Nägele T, Honegger J. Craniometric changes in patients with acromegaly from a surgical perspective. <i>Neurosurg Focus.</i> 2010;29:E3.	comparative study	90	2
Jayarathne YS, Zwahlen RA, Lo J, Cheung LK. Three-dimensional color maps: a novel tool for assessing craniofacial changes. <i>Surg Innov.</i> 2010;17:198–205.	Clinical trial		4
Carvalho Fde A, Cevidanes LH, da Motta AT, Almeida MA, Phillips C. Three-dimensional assessment of mandibular advancement 1 year after surgery. <i>Am J Orthod Dentofac Orthop.</i> 2010;137(4 suppl):S53.e1–S53.e12.	comparative study	27	3
da Motta AT, de Assis Ribeiro Carvalho F, Oliveira AE, Cevidanes LH, de Oliveira Almeida MA. Superimposition of 3D cone-beam CT models in orthognathic surgery.	review		5

Dent Press J Orthod. 2010;15:39-41.			
Dalessandri D, Laffranchi L, Tonni I, et al. Advantages of cone beam computed tomography (CBCT) in the orthodontic treatment planning of cleidocranial dysplasia patients: a case report. Head Face Med. 2011;7:6.	case report		4
Abou-Elfetouh A, Barakat A, Abdel-Ghany K. Computer-guided rapid-prototyped templates for segmental mandibular osteotomies: a preliminary report. Int J Med Robot. 2011;7: 187-192.	case report	1	4
De Riu G, Meloni SM, Baj A, Corda A, Soma D, Tullio A. Computer-assisted orthognathic surgery for correction of facial asymmetry: results of a randomised controlled clinical trial. Br J Oral Maxillofac Surg. 2014 Mar;52(3): 251-7.	RCT	20	2
Mori Y, Shimizu H, Minami K, Kwon TG, Mano T. Development of a simulation system in mandibular orthognathic surgery based on integrated three-dimensional data. Oral Maxillofac Surg. 2011 Sep;15(3):131-8.	comparative study	15	3
Quast A, Santander P, Witt D, Damm A, Moser N, Schliephake H, Meyer-Marcotty P. Traditional face-bow transfer versus three-dimensional virtual reconstruction in orthognathic surgery. Int J Oral Maxillofac Surg. 2019 Mar;48(3):347-354.	observational study	38	
Wu TY, Lin HH, Lo LJ, Ho CT. Postoperative outcomes of two- and three-dimensional planning in orthognathic surgery: A comparative study. J Plast Reconstr Aesthet Surg. 2017 Aug;70(8):1101-1111.	comparative study	60	2