

SAUDI BOARD RESIDENCY TRAINING PROGRAM

ORTHODONTIC AND DENTOFACIAL ORTHOPEDICS

Promotion Examination

Written Examination Format:

- A written examination shall consist of one paper with not less than 100 MCQs with a single best answer (one correct answer out of four options). Up to 10% unscored items can be added for pretesting purposes.
- The examination shall contain type K2 questions (interpretation, analysis, reasoning and decision making) and type K1 questions (recall and comprehension).
- The examination shall include basic concepts and clinical topics relevant to the specialty.
- Clinical presentation questions include history, clinical finding and patient approach. • Diagnosis and investigation questions; include the possible diagnosis and diagnostic methods. Management questions; including treatment and clinical management, either therapeutic or nontherapeutic, and complications of management. Materials and Instruments questions; including material properties, usage, and selection of instruments and equipment used. Health maintenance questions; include health promotion, disease prevention, risk factors assessment, and prognosis.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27-v.1



Passing Score:

The trainee's performance is assessed in each of the evaluation formulas according to the following scoring system:

Score	Less than 50%	50% – 59.4%	60% - 69.4%	More than 70%
Description	Clear Fail	Borderline Fail	Borderline Pass	Clear Pass

- 1. To upgrade the trainee from a training level to the next level, she/he must obtain at least a Borderline Pass in each evaluation form.
- 2. The program director may recommend to the local supervision committee to request the promotion of the trainee who did not meet the previous promotion requirement according to the following:
 - A. In case that the trainee gets a **Borderline Fail** result in one of the evaluation forms, the remaining evaluation forms must be passed with **Clear Pass** in at least one of them.
 - B. In case that the trainee gets a **Borderline Fail** result in two of the evaluation forms to a maximum, provided they do not fall under the same theme (Knowledge, Attitude, Skills). The remaining evaluation forms must be passed with **Clear Pass** in at least two of them.
 - C. The promotion must be approved in this case by the scientific council for the specialization.





Blueprint Outlines:

No.	Sections – R2	Percentage
1	Orthopedics: Class II, III, Expansion and Vertical	22%
2	Treatment Rationale	10%
3	Anchorage and Extra-oral Force	8%
4	Tissue Reactions to Tooth Movement, Retention and Relapse	5%
5	Speech, Swallowing, Respiratory, Soft tissue and Habits	5%
6	Orthognathic Surgery	20%
7	Interdisciplinary Treatment & Adult Orthodontics	20%
8	Occlusion and Temporomandibular Joint Disorders	5%
9	Behavioral Sciences	5%
	Total	100%

No.	Sections – R3	Percentage
1	Basic Orthodontic Topic	25%
2	Evidence Based Orthodontic	40 %
3	Retention and Stability	5%
4	TMJ and Occlusion	15%
5	Cleft Lip & Palate and Craniofacial Anomalies	10%
6	Orthognathic Surgery	5%
	Total	100%

Notes:

- Blueprint distributions of the examination may differ up to +/-5% ineach section.
- Percentages and content are subject to change at any time. See theSCFHS website for the most up-to-date information.
- Research, Ethics, Professionalism, and Patient Safety are incorporated within various domains.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27-v.1



Suggested References R2:

Speech, Swallowing, Respiratory Function and Habits

- 1. Johnson NC, Sandy JR. Tooth position and speech—is there a relationship? The Angle Orthodontist. 1999 Aug;69(4):306-10.
- 2. Warren JJ, Bishara SE. Duration of nutritive and nonnutritive sucking behaviorsand their effects on the dental arches in the primary dentition. Am J Orthod Dentofacial Orthop. 2002 Apr;121(4):347-56.
- 3. Behrents RG, Shelgikar AV, Conley RS, Flores-Mir C, Hans M, Levine M,

McNamara JA, Palomo JM, Pliska B, Stockstill JW, Wise J. Obstructive sleep apnea and orthodontics: an American Association of Orthodontists White Paper. American journal of orthodontics and dentofacial orthopedics. 2019 Jul1;156(1):13-28.

Tissue Reactions to Tooth Movement

- 1. Weltman B, Vig KW, Fields HW, Shanker S, Kaizar EE. Root resorption associated with orthodontic tooth movement: a systematic review. American journal of orthodontics and dentofacial orthopedics. 2010 Apr 1;137(4):462-76.
- 2. Zahrowski JJ. Bisphosphonate treatment: an orthodontic concern calling for aproactive approach. American Journal of Orthodontics and Dentofacial Orthopedics. 2007 Mar 1:131(3):311-20.

Treatment Rationale

- 1. Bishara SE, Khadivi P, Jakobsen JR. Changes in tooth size—arch length relationships from the deciduous to the permanent dentition: A longitudinal study. American Journal of Orthodontics and Dentofacial Orthopedics. 1995 Dec 1;108(6):607-13.
- 2. Kokich VG. Surgical and orthodontic management of impacted maxillary canines. American journal of orthodontics and dentofacial orthopedics. 2004 Sep 1;126(3):278-83.
- 3. Kokich VG, Kokich VO. Congenitally missing mandibular second premolars: clinical options. American Journal of Orthodontics and Dentofacial Orthopedics. 2006 Oct 1;130(4):437-44.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27-



- Stephens CK, Boley JC, Behrents RG, Alexander RG, Buschang PH. Long-term profile changes in extraction and nonextraction patients. American Journal of Orthodontics and Dentofacial Orthopedics. 2005 Oct 1;128(4):450-7.
- Leonardi R, Annunziata A, Licciardello V, Barbato E. Soft tissue changes following the extraction of premolars in nongrowing patients with bimaxillaryprotrusion: a systematic review. The Angle Orthodontist. 2010 Jan;80(1):211-6.
- 6. Kokich VG, Shapiro PA. Lower incisor extraction in orthodontic treatment: fourclinical reports. The Angle Orthodontist. 1984 Apr;54(2):139-53.
- Vilhjálmsson G, Zermeno JP, Proffit WR. Orthodontic treatment with removal of one mandibular incisor: Outcome data and the importance of extraction site preparation. American Journal of Orthodontics and Dentofacial Orthopedics. 2019 Oct 1;156(4):453-63
- George SM, Campbell PM, Tadlock LP, Schneiderman E, Buschang PH. Keys toClass II correction: A comparison of 2 extraction protocols. American Journal ofOrthodontics and Dentofacial Orthopedics. 2021 Mar 1;159(3):333-42.
- 9. Yezdani A, Nandhini N, Padmavati R. Serial extraction in orthodontics–A review.European Journal of Molecular & Clinical Medicine. 2020;7(2): 6432-6441.
- 10. O'Shaughnessy. Efficiency of serial extraction and late premolar extraction cases treated with fixed appliances. AJODO 139(4):510-16. Apr 2011

Anchorage: Lip Bumper, Implants, Extraoral Force and Miniscrews

- Hodge JJ, Nanda RS, Ghosh J, Smith D. Forces produced by lip bumpers on mandibular molars. American journal of orthodontics and dentofacial orthopedics. 1997 Jun 1;111(6):613-22.
- 2. Poggio PM, Incorvati C, Velo S, Carano A. "Safe zones": a guide for miniscrewpositioning in the maxillary and mandibular arch. Angle Orthod. 2006 Mar;76(2):191-7.
- Papageorgiou SN, Zogakis IP, Papadopoulos MA. Failure rates and associated risk factors of orthodontic miniscrew implants: a meta-analysis. Am J OrthodDentofacial Orthop. 2012 Nov;142(5):577-595.e7.
- Bondemark L, Karlsson I. Extraoral vs intraoral appliance for distal movement of maxillary first molars: a randomized controlled trial. The Angle Orthodontist 2005 Sep;75(5):699-706.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics–24-27– v.1



- Brosh T, Portal S, Sarne O, Vardimon AD. Unequal outer and inner bow configurations: comparing 2 asymmetric headgear systems. American journal of orthodontics and dentofacial orthopedics. 2005 Jul 1;128(1):68-75.
- 6. Vaughn GA, Mason B, Moon HB, Turley PK. The effects of maxillary protractiontherapy with or without rapid palatal expansion: a prospective, randomized clinical trial. Am J Orthod Dentofacial Orthop. 2005 Sep;128(3):299-309
- Papageorgiou SN, Kutschera E, Memmert S, Gölz L, Jäger A, Bourauel C, Eliades T. Effectiveness of early orthopaedic treatment with headgear: a systematic review and meta-analysis. European Journal of Orthodontics. 2017 Apr1;39(2):176-87.
- Bilbo EE, Marshall SD, Southard KA, Allareddy V, Holton N, Thames AM, Otsby MS, Southard TE. Long-term skeletal effects of high-pull headgear followed by fixed appliances for the treatment of Class II malocclusions. The Angle Orthodontist. 2018 Sep;88(5):530-7

Orthopedics and Class II Treatment

- 1. Patel HP, Moseley HC, Noar JH. Cephalometric determinants of successful functional appliance therapy. The Angle Orthodontist. 2002 Oct;72(5):410-7.
- Tulloch JC, Proffit WR, Phillips C. Outcomes in a 2-phase randomized clinical trial of early Class II treatment. American Journal of Orthodontics and Dentofacial Orthopedics. 2004 Jun 1;125(6):657-67.
- Burkhardt DR, McNamara Jr JA, Baccetti T. Maxillary molar distalization or mandibular enhancement: a cephalometric comparison of comprehensive orthodontic treatment including the pendulum and the Herbst appliances. American Journal of Orthodontics and Dentofacial Orthopedics. 2003 Feb 1;123(2):108-16.
- Janson G, Leon-Salazar V, Leon-Salazar R, Janson M, de Freitas MR. Long-termstability of Class II malocclusion treated with 2-and 4-premolar extraction protocols. American Journal of Orthodontics and Dentofacial Orthopedics. 2009 Aug 1;136(2):154-e1.
- Cozza P, Baccetti T, Franchi L, De Toffol L, McNamara Jr JA. Mandibular changesproduced by functional appliances in Class II malocclusion: a systematic review. American Journal of Orthodontics and Dentofacial Orthopedics. 2006 May 1;129(5):599-e1.



- 6. O'Brien K, Wright J, Conboy F, Sanjie Y, Mandall N, Chadwick S, Connolly I, CookP, Birnie D, Hammond M, Harradine N. Effectiveness of early orthodontic treatment with the Twinblock appliance: a multicenter, randomized, controlled trial. Part 1: dental and skeletal effects. American journal of orthodontics and dentofacial orthopedics. 2003 Sep 1;124(3):234-43.
- 7. Siara-Olds NJ, Pangrazio-Kulbersh V, Berger J, Bayirli B. Long-term dentoskeletal changes with the Bionator, Herbst, Twin Block, and MARA functional appliances. The Angle Orthodontist. 2010 Jan;80(1):18-29.
- 8. Cacciatore G, Ghislanzoni LT, Alvetro L, Giuntini V, Franchi L. Treatment and posttreatment effects induced by the Forsus appliance: a controlled clinical study. The Angle Orthodontist. 2014 Nov;84(6):1010-7.

Orthopedics and Class III Treatment

- 1. Ghiz MA, Ngan P, Gunel E. Cephalometric variables to predict future success of early orthopedic Class III treatment. American Journal of Orthodontics and Dentofacial Orthopedics. 2005 Mar 1;127(3):301-6.
- 2. Liu W, Zhou Y, Wang X, Liu D, Zhou S. Effect of maxillary protraction with alternatingrapid palatal expansion and constriction vs expansion alone in maxillary retrusive patients: a single-center, randomized controlled trial. American Journal of Orthodontics and Dentofacial Orthopedics. 2015 Oct 1;148(4):641-51.

Orthopedics Expansion

- 1. Baccetti T, Franchi L, Cameron CG, McNamara Jr JA. Treatment timing for rapid maxillary expansion. The Angle Orthodontist. 2001 Oct;71(5):343-50.
- 2. Ghoneima A, Abdel-Fattah E, Hartsfield J, El-Bedwehi A, Kamel A, Kula K. Effects of rapid maxillary expansion on the cranial and circummaxillary sutures. American Journal of Orthodontics and Dentofacial Orthopedics. 2011 Oct 1;140(4):510-9.
- 3. Lagravere MO, Major PW, Flores-Mir C. Long-term dental arch changes after rapid maxillary expansion treatment: a systematic review. The Angle Orthodontist. 2005 Mar;75(2):155-6.
- 4. Garib DG, Henriques JF, Janson G, Freitas MR, Coelho RA. Rapid maxillary expansion-tooth tissue-borne versus tooth-borne expanders: a computed tomography evaluation of dentoskeletal effects. Angle Orthod. 2005 Jul;75(4):548-57

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27- v.1



- 5. Handelman CS, Wang L, BeGole EA, Haas AJ. Nonsurgical rapid maxillary expansion in adults: report on 47 cases using the Haas expander. The Angle Orthodontist. 2000 Apr;70(2):129-44.
- 6. Marchetti C, Pironi M, Bianchi A, Musci A. Surgically assisted rapid palatal expansionvs. segmental Le Fort I osteotomy: transverse stability over a 2-year period. Journal of Cranio-Maxillofacial Surgery. 2009 Mar 1;37(2):74-8.
- 7. Wilmes B, Tarraf N, Drescher D. Treatment of maxillary transversal deficiency by usinga mini-implant-borne rapid maxillary expander and aligners in combination. American Journal of Orthodontics and Dentofacial Orthopedics. 2021 Jul 1;160(1):147-54.
- 8. Garrett BJ, Caruso JM, Rungcharassaeng K, Farrage JR, Kim JS, Taylor GD. Skeletal effects to the maxilla after rapid maxillary expansion assessed with cone-beam computed tomography. Am J Orthod Dentofacial Orthop. 2008 Jul;134(1):8-9.

Vertical Dimension

- 1. Khosravi R, Cohanim B, Hujoel P, Daher S, Neal M, Liu W, Huang G. Management of overbite with the Invisalign appliance. American journal of orthodontics and dentofacial orthopedics. 2017 Apr 1;151(4):691-9.
- 2. Al-Buraiki, Sadowsky, Schneider. The effectiveness and long-term stability of overbite correction with incisor intrusion mechanics. AJODO 2005 Jan;127(1)47-55.
- 3. Greenlee GM, Huang GJ, Chen SS, Chen J, Koepsell T, Hujoel P. Stability of treatmentfor anterior open-bite malocclusion: a meta-analysis. Am J Orthod Dentofacial Orthop. 2011 Feb:139(2):154-69. Review.

Soft Tissue

- 1. Sarver DM. The importance of incisor positioning in the esthetic smile: the smile arc. American Journal of Orthodontics and Dentofacial Orthopedics. 2001 Aug 1;120(2):98-111.
- 2. Desai S, Upadhyay M, Nanda R. Dynamic smile analysis: changes with age. American Journal of Orthodontics and Dentofacial Orthopedics. 2009 Sep 1;136(3):310-e1.



3. Ker AJ, Chan R, Fields HW, Beck M, Rosenstiel S. Esthetics and smile characteristics from the layperson's perspective: a computer-based survey study. The Journal of the American Dental Association. 2008 Oct 1;139(10):1318-27.

Retention and Relapse

- 1. Zachrisson BU. Important aspects of long term stability. J Clin Orthod. 1997;31:562-83.
- Little RM. Stability and relapse of dental arch alignment. British journal of orthodontics.
 1990 Aug;17(3):235-41
- 3. Al-Moghrabi D, Littlewood SJ, Fleming PS. Orthodontic retention protocols: An evidence-based overview. British Dental Journal. 2021 Jun;230(11):770-6.

Interdisciplinary Treatment & Adult Orthodontics

- Adult Orthodontics. Birte Melsen. 2012, 1st Edition, Wiley- Blackwell, Hoboken. ISBN: 978-1405136198.
- Chapter 18: Special Considerations in Treatment for Adults in: Contemporary Orthodontics. William R. Proffit, Henry W. Fields Jr., David M. Sarver. 2012, 5th Edition, Mosby Inc., Saint Louis. ISBN: 978-0323083171.
- Spear FM, Kokich VG, Mathews DP. Interdisciplinary management of anterior dental esthetics. JADA 2006;137(2):160–9.
- 4. Thilander B. Orthodontic space closure versus implant placement in subjects with missing teeth. J Oral Rehabil 2008;35:64–71.
- 5. Pinho T, Neves M, Alves C. Multidisciplinary management including periodontics, orthodontics, implants, and prosthetics for an adult. AJODO 2012 Aug;142(2):235–45.
- 6. Capelozza Filho L, Aranha MFB, Ozawa TO, Cavassan AO. Orthodontic treatment in adults: Restoring smile esthetics. Dental Press J Orthod 2012 Sept-Oct;17(5):53–63.
- Kovich V. Esthetics and anterior tooth position: an orthodontic perspective. Part I: Crown length. J Esthet Dent 1993;5(1):19-23.
- 8. Kokich V. Esthetics and anterior tooth position: an orthodontic perspective. Part II: Vertical position. J Esthet Dent 1993;5(4):174–8.
- Kokich V. Esthetics and anterior tooth position: an orthodontic perspective. Part III: Mediolateral relationships. J Esthet Dent 1993;5(5):200-7.

- 10. Zachrisson BU. Orthodontic treatment in a group of elderly adults. World J Orthod 2000;1:55-70.
- 11. Kokich VG. Adult orthodontics in the 21st century: guidelines for achieving successful results. World J Orthod 2005;6 Suppl:14-23.
- 12. Pinho T, Neves M, Alves C. Multidisciplinary management including periodontics, orthodontics, implants, and prosthetics for an adult. AJOD0 2012 Aug;142(2):235–45.

Behavioral Science

- 1. Humphris G, Ling MS, 2000. Behavioural Sciences for Dentistry. Elsevier Health Sciences.
- 2. Mostofsky DI, Fortune F, 2013. Behavioral dentistry. John Wiley & Sons.
- 3. Baer DM. Advances and gaps in a behavioral methodology of pediatric medicine. In: Krasgenor, N.A., Arasteh, J.D. and Cataldo, M.F. Child Health Behavior, John Wiley & Sons, Inc., pp. 54-69, 1986.
- 4. Houlihan D, Jesse V, Levine H, Sombke C. A survey of rewards for use with teenage children. Child and Family Behavior Therapy. 1991;13,1-12.
- 5. Blum NJ, Williams GE, Friman PC, Christophersen ER. Disciplining young children: The role of verbal instruction and reasoning. Pediatrics. 1995;96: 336-341.
- 6. Friman PC and Leibowitz JM. An effective and acceptable treatment alternative for chronic thumb- and finger-sucking. Journal of Pediatric Psychology. 1990;15: 57-65.
- 7. Van Houten R, Rolider A. The use of response prevention to eliminate nocturnal thumb sucking. Journal of Applied Behavior Analysis. 1984;17: 509-520.
- 8. Cameron CA. Informed consent in orthodontics. Seminars in Orthodontics. 1997;3:77-93.
- 9. Velan E, Kiyak HA, Mouradian WE, Slayton RL, Psoter K. A study of informed consent and health literacy in a university pediatric dental residency setting. Manuscript in preparation.
- 10. Jerrold L. Understanding the Basics of the Dentist-patient Relationship, the Standardof Care, and Informed Consent in Orthodontic Clinical Setting. Seminars in Orthodontics. 2002;8:177-197.



- 11. Mortensen MG, Kiyak HA, Omnell L. Patient and parent understanding of informed consent in orthodontics. Am J Orthod Dentofacial Orthop. 2003;124(5): 541-550.
- 12. Ackerman JL, Proffit WR. Communication in orthodontic treatment planning: Bioethical and informed consent issues. Angle Orthod. 1995;65: 253-262.
- Katz, J. Duty and Caring in the Age of Informed Consent and Medical Science: Unlocking Peabody's Secret. Humane Medicine. 1992;8: 187-197.
- Jensen, Melsen. Factors of importance for the functional outcome in orthognathic surgery patients: A prospective study of 118 patients. J Oral & Maxillofac Surg. In press 2010.
- Motegi E, Hatch JP, Rugh JD, Yamaguchi H. Health-related quality of life and psychosocial function 5 years after orthognathic surgery. Am J Orthod Dentofacial Orthop. 2003;124: 138-143.
- Ackerman MB, McRae MS, Longley WH. Microsensor Technology to help monitor removable appliance wear. Am J Orthod Dentofacial Orthop. 2009;135: 549-551.
- 17. Sahm G, Bartsch A, Witt E. Reliability of patient reports on compliance. European Journal of Orthodontics. 1990;12: 438-446.
- Machen DE. The uncooperative patient: Terminating orthodontic care. Am J Orthod Dentofacial Orthop. 1990;97(6): 528-529.
- Ramsay DS, Soma M, Sarason IG. Enhancing patient adherence: The role of technology and its application to orthodontics. In: J.A. McNamara, Jr. and C.A. Trotman (Eds.), Creating the Compliant Patient. Volume 33, Craniofacial Growth Series, Center for Human Growth and Development, University of Michigan, Ann Arbor, 1997.
- 20. Sheller B. Orthodontic management of patients with seizure disorders. Semin Orthodontics. 2004;10: 247-251.
- Becker A, Shapira J. Orthodontics for the handicapped child. Eur J Orthod. 1985;18: 262-266.
- Becker A, Shapira J, Chausa S. Orthodontic Treatment for disabled Children A Survey of patient and Appliance Management. Journal of Orthodontics. 2001;28: 39-44.



الهيئة السعودية للتخصصات الصحية Saudi Commission for Health Specialties



- 23. Williams BJ. Modified orthodontic treatment goals in a patient with multiple complicating factors. Special Care in Dentistry. 1992;12: 251-254.
- 24. Van Venrooy JR, Proffit WR. Orthodontic care for medically compromised patients: Possibilities and limitations. Journal of the American Dental Association. 1985;111: 262-266.
- 25. Muir JD, Calvert EJ. Vomiting during the taking of dental impressions. Two case reports of the use of psychological techniques. British Dental Journal. 1988;165: 139-141.
- 26. Bassi GS, Humphris GM, Longman LP. The etiology & management of gagging; A review of the literature. J Prosthet Dent. 2004;91: 459-467.
- 27. Ross DM, Ross SA. Childhood pain: The school-aged child's viewpoint. Pain. 1984;20: 179-191.

Occlusion and Temporomandibular Disorders

- 1. Okeson JP: Management of Temporomandibular Disorders and Occlusion, ed8, Elsevier, 2019.
- 2. Profitt WR, White RP, Sarver DM. Contemporary Treatment of Dentofacial Deformities.

Suggested References R3:

Basic Orthodontic Topic Superimpositions

- 1. Doppel DM, Damon WM, Joondeph DR, Little RM. An investigation of maxillary superimposition techniques using metallic implants. Am J Orthod Dentofacial Orthop. 1994 Feb;105(2):161-8.
- 2. Nielsen IL. Maxillary superimposition: a comparison of three methods for cephalometric evaluation of growth and treatment change. Am J Orthod Dentofacial Orthop. 1989 May;95(5):422-31.
- 3. Nguyen, T., Cevidanes, L., Franchi, L., Ruellas, A., & Jackson, T. (2018). Threedimensional mandibular regional superimposition in growing patients. American Journal of Orthodontics and Dentofacial Orthopedics, 153(5), 747-754.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27-v.1



4. Beit, P., Konstantonis, D., Papagiannis, A., & Eliades, T. (2017). Vertical skeletal changes after extraction and nonextraction treatment in matched class I patients identified by a discriminant analysis: cephalometric appraisal and Procrustes superimposition. Progress in orthodontics, 18(1), 44.

Biomechanics and Temporary Anchorage Devices

- Isaacson RJ, Lindauer SJ, Davidovitch M. The ground rules for arch wire design. Semin Orthod 1(1):3-11, 1995.
- Charles J. Burstone. Biomechanics of deep overbite correction. Semin Orthod 7(1):26-33, 2001.
- 3. E Edsard van Steenbergen, and Ravindra Nanda, Biomechanics of Orthodontic correctionof dental asymmetries, Am J Orthod Dentoface Orthop, 1995;107:618-24.
- Yan Chen, Hee Moon Kyung, Wen Ting Zhao, and Won Jae Yu, Critical factors for the success of orthodontic mini-implants: A systematic review. Am J Orthod Dentofacial Orthop 2009;135:284-91.
- 5. Proffit WR. Contemporary Orthodontics. 6th edition, Chapter 9.

Craniofacial Growth

- 1. Thilander, B. (2017). Craniofacial growth and development. Essential Orthodontics, 30, 25.
- 2. Proffit WR. Contemporary Orthodontics. 6th edition, Chapter 2 4.
- Thilander B. Basic mechanisms in craniofacial growth. Acta Odontol Scand 53(3):144-151, 1995.
- 4. Ranly DM. Craniofacial growth. Dent Clin North Am 44(3):457-470, 2010.
- 5. Bjork, A. Prediction of Mandibular Rotation. Am. J. Orthod. 55: 585 599,1969.
- W Wishney, M., Darendeliler, M., & Dalci, O. (2018). Craniofacial growth studies in orthodontic research lessons, considerations and controversies. Australasian Orthodontic Journal, 34(1), 61.
- W Dager MM, McNamara JA, Baccetti T, Franchi L. Aging in the craniofacial complex. Angle Orthod 78(3):440-444, 2008.
- Pecora NG, Baccetti T, McNamara JA Jr. The aging craniofacial complex: a longitudinal cephalometric study from late adolescence to late adulthood. Am J Orthod Dentofacial Orthop 134(4):496-505, 2008.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics–24-27– v.1



- Mossey PA. The heritability of malocclusion: part 2. The influence of genetics in malocclusion. Br J Orthod 26(3):195-203, 1999.
- Derya Germec Cakan, Feyza Ulkur, and Tulin (Ugur) Taner. The genetic basis of facial skeletal characteristics and its relation with orthodontics. Eur J Dent. 2012 July; 6(3): 340–345.

Evidence Based Orthodontic

Growth Modification, Asymmetry, Bimaxillary Dentoalveolar Protrusion

- Cozza P, Baccetti T, Franchi L, De Toffol L, McNamara JA. Mandibular changes producedby functional appliances in Class II malocclusion: a systematic review. Am J Orthod Dentofacial Orthop 129(5):599, e1-12, 2006.
- Mandall, N., Cousley, R., DiBiase, A., Dyer, F., Littlewood, S., Mattick, R., & Shargill, I. (2016). Early class III protraction facemask treatment reduces the need for orthognathicsurgery: a multi-centre, two-arm parallel randomized, controlled trial. Journal of orthodontics, 43(3), 164-175.
- 3. Bishara SE, Burkey PS, Kharouf JG. Dental and facial asymmetries: a review. Angle Orthod 64(2):89-98, 1994.
- 4. Charles J. Burstone. Diagnosis and treatment planning of patients with asymmetries. Semin Orthod 4(3):153-164, 1998.
- 5. Bills DA, Handelman CS, BeGole EA. Bimaxillary dentoalveolar protrusion: traits and orthodontic correction. Angle Orthod 75(3):333-339, 2005.

Impacted Canines

- Kokich VG. Surgical and orthodontic management of impacted maxillary canines. Am J Orthod Dentofacial Orthop 126:278-283, 2004.
- Andrew Schmidt, Vincent Kokich, Peridontal response to early uncovering autonomous eruption, and orthodontic alignment of palatally impacted maxillary canines. Am J Orthod Dentofacial Orthop 2007; 131:449-55.
- 3. Elliott M. Moskowitz, Ronniette C. Garcia, The management of palatally displaced maxillary canines: Considerations and challenges. Semin Orthod 2014;20:46-58.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27- v.:



4. Management of Impactions. Lee W. Graber, Orthodontics: Current Principles and Techniques. 6th Edition. Chapter 28.

Transverse Dimension

- 1. Marshall SD, Southard KA, Southard TE. Early Transverse Treatment. Semin Orthod 11(3):130-139, 2005.
- Pinto, A. S., Buschang, P. H., Throckmorton, G. S., & Chen, P. (2001). Morphological and positional asymmetries of young children with functional unilateral posterior crossbite. American Journal of Orthodontics and Dentofacial Orthopedics, 120(5).
- Suri L, Taneja P. Surgically assisted rapid palatal expansion: a literature review. Am J Orthod Dentofacial Orthop. 2008 Feb;133(2):290-302.

Vertical

- Elsevier Vaden JL, Pearson LE. Diagnosis of the vertical dimension. Semin Orthod 8(3):120-129, 2002.
- Turley PK. Orthodontic management of the short face patient. Semin Orthod 2(2):138-153, 1996.
- 3. Budi Kusnoto and BernardJ. Schneider. Control of the Vertical Dimension. Semin Orthod 2000;6:33-42.

Interceptive and Trauma

- Mucedero, M., Fusaroli, D., Franchi, L., Pavoni, C., Cozza, P., & Lione, R. (2018). Long-term evaluation of rapid maxillary expansion and bite- block therapy in open bite growing subjects: A controlled clinical study. The Angle Orthodontist.
- Ferro, F., Funiciello, G., Perillo, L., & Chiodini, P. (2011). Mandibular lip bumper treatmentand second molar eruption disturbances. American Journal of Orthodontics and Dentofacial Orthopedics, 139(5), 622-627.
- 3. Monty Singh Duggal, Jay Kindelan, Hani Nazzal. Upper incisor trauma and the orthodontic patient—Principles of management. Semin Orthod 2015; 21:59–7.
- A Management of Dental Luxation and Avulsion Injuries in the Permanent Dentition. Lee
 W. Graber, Orthodontics: Current Principles and Techniques. 6th Edition. Chapter 29.



Congenitally Missing Laterals and Multidisciplinary

- Kokich VG, Spear FM. Guidelines for managing the orthodontic- restorative patients. Semin Orthod 3(1):3-20, 1997.
- 2. Mathews DP, Kokich VG. Managing treatment for the orthodontic patient with periodontal problems. Semin Orthod 3(1):21-38, 1997.
- 3. Eustiquio A. Araujo. Diagnostic Protocol In Cases Of Congenitally Missing Maxillary Lateral Incisors. World J Orthod 2006;7:376–388.

Medications and Allergies

- 1. Eustáquio A. Araŭjo. Diagnostic Protocol In Cases Of Congenitally Missing Maxillary Lateral Incisors. World J Orthod 2006;7:376–388.
- Kolokitha OE, Chatzistavrou E. Allergic reactions to nickel-containing orthodontic appliances: clinical signs and treatment alternatives. World J Orthod. 2008 Winter;9(4):399-406.
- P Patel A, Burden DJ, Sandler J. Medical disorders and orthodontics. J Orthod. 2009 Dec;36 Suppl:1-21.

Cleft Lip & Palate and Craniofacial Anomalies

- 1. Berkowitz, S. Cleft Lip and Palate with an Introduction to Other Craniofacial Anomalies Perspectives in Management (Two-Volume Set), 1995. Singular Publishing Group
- Evans CA. Orthodontic treatment for patients with clefts. Clin Plast Surg 31(2):271-290, 2004.
- The Orthodontist's Role in a Cleft Palate–Craniofacial Team. Lee W. Graber, Orthodontics: Current Principles and Techniques. 6th Edition. Chapter 14.
- 4. Thornton J, Nimer S, Howard P. The incidence, classification, etiology, and embryology of oral clefts. Semin Orthod 2(3):162-168, 1996.

Retention and Stability

 Freitas KM, Massaro C, Miranda F, de Freitas MR, Janson G, Garib D. Occlusal changes in orthodontically treated subjects 40 years after treatment and comparison with untreated control subjects. American Journal of Orthodontics and Dentofacial Orthopedics. 2021 Nov 1;160(5):671-85.

Saudi Board Promotion Written Examination; Orthodontics and Dentofacial Orthopedics-24-27- v.1



- Zachrisson BU. Important aspects of long-term stability. J Clin Orthod 31(9): 562-583, 1997.
- Melrose C, Millett DT. Toward a perspective on orthodontic retention? Am J Orthod Dentofacial Orthop. 1998 May;113(5):507-14.
- Little RM. Stability and relapse of dental arch alignment. Br J Orthod 17(3): 235-241, 1990.
- 5. Bishara SE. Third molars: a dilemma! Or is it? Am J Orthod Dentofacial Orthop 115(6):628-633, 1999.
- 6. Z Al-Moghrabi D, Littlewood SJ, Fleming PS. Orthodontic retention protocols: An evidence-based overview. British Dental Journal. 2021 Jun;230(11):770-6.

TMJ and Occlusion

- 1. Donald J. Rinchuse, and Jeffrey T. McMinn, Summary of evidence based systematic reviews of temporomandibular disorders. Am J Orthod Dentofacial Orthop 2006;130:715-20.
- Jeffrey P. Okeson. Evolution of occlusion and temporomandibular disorder in orthodontics: Past, present, and future. Am J Orthod Dentofacial Orthop 2015;147:S216-23).
- Sadowsky, C., & Polson, A. M. (1984). Temporomandibular disorders and functional occlusion after orthodontic treatment: results of two long-term studies. American journalof orthodontics, 86(5), 386-390.
- Andrews LF. The six keys to normal occlusion. Am J Orthod Dentofacial Orthop 62(3):296- 309, 1972.

Orthognathic Surgery

- Sabri R. Orthodontic objectives in orthognathic surgery: state of the art today. World J Orthod 7(2):177-191, 2006.
- Bailey LJ, Cevidanes LH, Proffit WR. Stability and predictability of orthognathic surgery. Am J Orthod Dentofacial Orthop 126(3):273-277, 2004.
- Larry M. Wolford, Spiro C. Karras, and Pushkar Mehra, Considerations for orthognathic surgery during growth, Part 1: Mandibular deformities. Am J Orthod Dentofacial Orthop 2001;119:95-101.



4. Naini FB, Gill DS. Facial aesthetics: 2. Clinical assessment. Dent Update 35(3):159-162, 164-166, 169-170, 2008

Note:

This list is intended for use as a study aid only. SCFHS does not intend the list toimply endorsement of these specific references, nor are the exam questions necessarily taken solely from these sources.