

# Perception and knowledge of dental interns toward interdepartmental coordination for successful prosthodontic treatment: A pilot study

Kamal Shigli, Pradnya Kakodkar<sup>1</sup>, Neha Agrawal<sup>2</sup>, Mamata Hebbal<sup>3</sup>, Dayanand Huddar, M. Vikneshan<sup>4</sup>

Department of Prosthodontics, Bharati Vidyapeeth Deemed University Dental College and Hospital, Sangli, <sup>1</sup>Department of Public Health Dentistry, Dr. D. Y. Patil Dental College and Hospital, Pimpri, Pune, <sup>4</sup>Indira Gandhi Institute of Dental Sciences, Pondicherry, <sup>2</sup>Department of Periodontics and Community Dentistry, Dr. Z.A. Dental College, AMU, Aligarh, <sup>3</sup>Department of Preventive and Community Dentistry, K.L. E. V. K. Institute of Dental Sciences, Belgaum, Karnataka, India

## Abstract

**Background:** The graduating dentist should be trained in providing treatment utilizing the interdisciplinary approach because of the rapid advancements and increase in patient expectations, which demands for collaboration between the different specialists.

**Purpose:** A pilot study was undertaken with an aim to assess the perception and knowledge of dental interns toward interdepartmental coordination for successful prosthodontic treatment.

**Subjects and Methods:** Dental interns from two dental colleges in Sangli (India) participated in the study. A 24-item self-administered, structured closed-ended questionnaire was used to collect the data. Four questions assessed the perception and 20 questions assessed the knowledge, which were based on the four domains viz.: General, Endodontics, Orthodontics, and Prosthodontics. They were framed from case scenarios reporting to the Department of Prosthodontics, which required interdepartmental consultation. The questionnaire was validated before its application and reliability were also assessed. The final score for each question was calculated based on the correct responses. Descriptive analysis was calculated using the frequencies, percentages, and mean values by using SPSS 16 software.

**Results:** Among 117 interns who participated in the study, 79.5% reported that they lacked training in an interdisciplinary approach. Approximately, 96% reported that the curriculum should be designed to include interdisciplinary training. Nearly, 88% reported that specialist from different specialty should be posted in one interdisciplinary department. Around 60% reported that they did not have the confidence of treating the patient as a whole. When the overall mean scores were considered, the highest scores were obtained for the general domain (95.3) and the lowest for the prosthodontic domain (83.6).

**Conclusion:** The dental interns perceived that they lacked training in interdisciplinary approach, and the curriculum should include interdisciplinary training.

**Key Words:** Horizontal integration, interdisciplinary dentistry, quality care, team approach

### Address for correspondence:

Dr. Kamal Shigli, B-4, Staff Quarters, Bharati Vidyapeeth Deemed University Dental College and Hospital, Wanlesswadi, Sangli-Miraj Road, Sangli - 416 414, Maharashtra, India. E-mail: kamalshigli@yahoo.co.in

**Received:** 29<sup>th</sup> March, 2015, **Accepted:** 06<sup>th</sup> June, 2015

### Access this article online

#### Quick Response Code:



#### Website:

www.j-ips.org

#### DOI:

10.4103/0972-4052.161570

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

**For reprints contact:** reprints@medknow.com

**How to cite this article:** Shigli K, Kakodkar P, Agrawal N, Hebbal M, Huddar D, Vikneshan M. Perception and knowledge of dental interns toward interdepartmental coordination for successful prosthodontic treatment: A pilot study. *J Indian Prosthodont Soc* 2015;15:342-6.

## INTRODUCTION

Various disciplines in dentistry have to be utilized judiciously to deliver the highest level of dental care to each patient.<sup>[1]</sup> In some instances existing dentitions simply cannot be restored to a more pleasing appearance without the assistance of several different dental disciplines. Methodical understanding of the roles of these various disciplines in producing an esthetic makeover is required, with the most conservative and biologically sound interdisciplinary treatment plan.<sup>[1]</sup>

In India, the undergraduate dental curriculum has students in 3<sup>rd</sup> and 4<sup>th</sup> year divided into small groups, which complete rotations in various clinical departments. At the end of their rotations, the students usually get trained with the clinical abilities of the particular department. However, they are poorly prepared to recommend comprehensive treatment planning.<sup>[2-4]</sup> For example, a student completing posting in the Department of Prosthodontics has an opportunity to provide the patient with only complete and removable partial dentures. Interdisciplinary dentistry involves a structured collaboration between restorative dentists and specialists involved in patient treatment; furthermore, there is a common working knowledge between all parties. "Structured collaboration" refers to all the treatment providers working together in harmony. The planning and execution of the treatment are structured and discussed together, and the vision is the same.<sup>[5]</sup>

In this age of rapid advancements and increased patient expectations, an interdisciplinary collaboration of dental specialists and allied health professionals has become essential for better treatment outputs.<sup>[6,7]</sup> Interdisciplinary planning linking tooth conservation, periodontal tissue care, correction of malocclusion etc., establishes a common goal that benefits patient care.<sup>[8]</sup> Each of the specialists involved is a very important cog in the wheel.<sup>[9]</sup> The restorative dentist has an obligation to visualize the endpoint to completion and coordinate the team to achieve the desired outcome.<sup>[5]</sup> "To have an accurate starting point, every problem to long-term health must be recognized; planning the complete process to a visualized end point should come first."<sup>[10]</sup> While proper diagnosis and treatment planning, as well as precise execution of the treatment, are important for the interdisciplinary approach, it is the good communication and rapport among the specialists that is the key to the success of the final outcome.<sup>[11]</sup>

Many dental students do not choose additional formal training beyond their dental school program, so adequate training to interact with other professionals in order to provide quality care must occur during dental school.<sup>[12]</sup>

The students' perception of their training and their knowledge in the application of interdisciplinary approach has been least

explored. Hence, we carried out a pilot study with an aim to assess dental interns' perception and knowledge toward interdepartmental coordination for successful prosthodontic treatment. This was done by using a tool based on horizontal teaching integration.

## SUBJECTS AND METHODS

A cross-sectional questionnaire study was conducted on dental interns of Bharati Vidyapeeth Deemed University Dental College and Hospital, and Vasantdada Patil Dental College and Hospital, Sangli. Ethical clearance was obtained from the Institutional Ethics Committee to conduct the study.

The interns of both the colleges who were willing to participate were included in the study. Written consent was obtained from study participants after explaining in detail about the study. The instrument used was a self-administered, structured, closed-ended questionnaire measuring the dental interns' perception, and knowledge toward interdepartmental coordination for successful prosthodontic treatment. The investigators identified four domains involving interdepartmental coordination. In each domain, subtopics were identified by two investigators (KS and DH) based on relevance and were included in the questionnaire after a consensus.

The questions were framed from case scenarios reporting to the Department of Prosthodontics and requiring interdepartmental consultation. The content validity for the questionnaire was analyzed as per the procedures given by Lawshe.<sup>[13]</sup> Content validity of the questionnaire was measured by taking the opinion of 30 subject experts, and the questionnaire was modified accordingly. If any question had a content validity ratio of <0.33, the question was deemed as inadequate and was deleted or changed after consultation with the experts. After the validity assessment, out of 27 original questions, 23 were retained without any change, one was modified, and three were deleted. The modified questionnaire consisted of 24 items [Appendix I]. Part A comprised of four questions related to the perception of dental interns toward an interdisciplinary approach in prosthodontics (options yes/no). Part B comprised of 20 questions related to knowledge of dental interns regarding interdisciplinary approach. Part B was further divided into four domains: General (2 questions), Endodontics (3 questions), Orthodontics (3 questions), and Prosthodontics (12 questions).

The questionnaire was then evaluated by experts for face validity. Face validity was assessed by asking whether the questionnaire was good enough to measure interdepartmental coordination.<sup>[14]</sup> No changes were suggested, and all 30 experts approved the questionnaire.

The questionnaire was administered to 11 outgoing batch of interns to check the comprehensibility of the questions. These interns were excluded from the main study. Then the main study was performed in the following way. All the interns of the 2013–2014 batch who had completed their final year were assembled in a classroom and were briefed about the study. Those who consented filled up the questionnaire. Each “correct” answer to a question was awarded one point while an “incorrect” response was given zero. Questions that were not answered were given zero points. Responses that were overwritten were excluded from analysis. The scores were calculated based on correct responses to the 20 items (knowledge questions). Based on the interns’ outlook regarding interdisciplinary approach their mean scores were calculated. The collected data were entered in Microsoft Excel. Descriptive analysis was performed by calculating the frequencies, percentages, and mean values. The analysis was performed using the Statistical Package for the Social Sciences version 16.0 (SPSS Inc., Released 2007, Chicago, Illinois, USA).

## RESULTS

A total of 117 interns participated in the study female ( $n = 97$ ) and male ( $n = 20$ ) with the response rate of 93.6%. 93 interns (79.5%) reported that they lacked training in interdisciplinary approach, and 24 interns (20.5%) reported they had adequate training. 113 interns (96.6%) reported that the curriculum should be designed to include training for an interdisciplinary approach to dentistry, and 4 interns (3.4%) reported that the curriculum should not include training for an interdisciplinary approach. A total of 103 interns (88%) reported that specialist from different specialty should be posted in one interdisciplinary department and 14 interns (12%) reported that specialist from different specialty should not be posted in one interdisciplinary department. A total of 46 interns (39.3%) reported that they had confidence of treating the patient as a whole and 71 interns (60.7%) reported that they did not have confidence of treating the patient as a whole [Table 1].

**Table 1: Distribution of subjects according to the perception of dental interns toward interdisciplinary approach in prosthodontics**

	Response	Frequency ( $n=117$ ) (%)
Q1. Do you feel you lack training in an interdisciplinary approach to dentistry?	No	24 (20.5)
	Yes	93 (79.5)
Q2. Do you feel the curriculum should be designed such that you receive training for an interdisciplinary approach to dentistry?	No	4 (3.4)
	Yes	113 (96.6)
Q3. Do you feel that specialist from different specialty' should be posted in one interdisciplinary department?	No	14 (12.0)
	Yes	103 (88.0)
Q4. Do you think you are confident in treating a patient as a whole/ comprehensively?	No	71 (60.7)
	Yes	46 (39.3)

When the overall mean percentage of correct responses for the four domains (general domain, endodontic, orthodontic domain, and prosthodontic domain) were considered the highest scores were obtained for the general domain (95.3) and the lowest for the prosthodontic domain (83.6) [Table 2].

## DISCUSSION

Dental education faces a number of challenges in its efforts to train dental graduates who will interact with and be understood by other professionals.<sup>[15]</sup>

The current dental curriculum in India is traditional which begins with parts of the whole. The students are expected to practice with training gathered from different specialty, and this training is compartmentalized. When the students are faced with the challenge to combine all this training in a single patient, they feel challenged. This difficulty is addressed by interdisciplinary approach or horizontal integration.

Interdisciplinary dentistry is marked by the application of perspectives, concepts, and methods that go beyond the limits of individual specialty.<sup>[16]</sup> In lieu of its demand in patients’ with extensive oral rehabilitation and well-informed patients’ with higher expectations the present cross-sectional questionnaire study was undertaken with an aim to assess dental interns perception and knowledge toward interdepartmental coordination for successful prosthodontic treatment using a tool based on horizontal teaching integration. We could not come across an identical study for comparison.

According to the results of the present study, the majority of dental interns perceived that they lacked training in interdisciplinary approach, curriculum should be designed to include interdisciplinary approach and specialist from different specialty should be posted in one interdisciplinary department. Only 46 (39%) interns were confident in comprehensively treating a patient. The results of our study are similar to those of Shetty *et al.*,<sup>[17]</sup> where 42% of the students were confident about starting dental practice. The results of our study are in disagreement with those of Arena *et al.*<sup>[18]</sup> according to whom most graduates perceived themselves to be confident to practice. The reason for the difference in results could be due to the time period of the study as Arena *et al.* conducted a longitudinal study as oppose to our cross-sectional study.

The results of the study highlighted that the highest overall mean scores was for the general domain (95.3%), which could be as we keep on stressing on these aspects in all departments right from the time the student enters the clinical section. These results are similar to those of Arena *et al.* who reported competence in the more common aspects of general dentistry.

**Table 2: Percentage of correct answers by the dental interns in each domain**

General domain	Mean percentage score=95.3
Q5. What would be your sequence of treatment for a patient who reports to you with carious teeth, root stumps, and missing teeth?	97.4
Q6. Is it necessary to make routine blood investigations such as blood sugar and complete hemogram compulsory for patients above 40 years of age?	93.2
<b>Endodontic domain</b>	<b>Mean percentage score=92.9</b>
Q7. A patient aged 25 years reports with endodontically treated 47. Radiographic examination reveals impacted 48. How do you proceed?	95.7
Q8. A partially edentulous patient comes for replacement of missing teeth. Examination reveals a mandibular Kennedy's Class I situation with supra erupted maxillary posteriors with deep caries. How do you proceed?	98.3
Q9. Comment on the use of post and core in endodontically treated teeth	84.9
<b>Orthodontic domain</b>	<b>Mean percentage score=86.1</b>
Q10. What would be your line of treatment for a patient aged 20 years who reports to you with missing 36 and crowding of teeth in the mandibular anterior region?	97.4
Q11. A patient aged 30 years comes with missing 11. Examination reveals that the patient has a severe deep bite. What would be your line of treatment?	92.3
Q12. If a 40-year-old patient with spaced anteriors and good periodontal health reports for the closure of spacing how would you proceed?	68.4
<b>Prosthodontic domain</b>	<b>Mean percentage score=83.6</b>
Q13. What is your outlook regarding oral prophylaxis being carried out before any prosthodontic treatment (except complete denture)?	85.5
Q14. What is your outlook regarding laboratory communication being carried out before any prosthodontic treatment?	59.8
Q15. The design of a removable partial denture plays an important role for the (future) periodontal health	94.9
Q16. Periodontal health is of paramount importance for all teeth, both sound and restored	97.4
Q17. Oral hygiene instructions can be neglected in fixed prosthodontic treatment	100
Q18. All TMJ problems are due to occlusal discrepancies	100
Q19. How important do you think are radiographs of abutment teeth for replacement of missing teeth?	88.9
Q20. A patient with all missing teeth comes for a complete denture. Intraoral examination reveals that patient has a white patch on the buccal mucosa regarding which he is not aware. How would you proceed?	100
Q21. Whether all endodontically treated teeth should be prepared to receive crown irrespective of the tooth structure?	34.2
Q22. Whether for all resorbed ridges we should go for ridge augmentation surgery?	90.6
Q23. If a completely edentulous patient reports with prominent genial tubercle what would be your first line of treatment?	68.4
Q24. A completely edentulous patient reports with bilateral tuberosity undercuts and an anterior undercut. What would be your line of treatment?	83.8

TMJ: Temporomandibular joint

The next high overall mean score was obtained for the endodontic domain (92.9%), which may have been as the students may have encountered these situations more frequently.

The lowest overall mean score was obtained for the prosthodontic domain (83.6%).

Questions related to restoration of endodontically treated teeth, importance of laboratory communication being carried out before any prosthodontic treatment, and treatment plan for a completely edentulous patient with prominent genial tubercle seemed to be an area of less knowledge and needs to be stressed.

The next lowest mean score was for the orthodontic domain (86.1%). There appeared to be a lack of awareness related to the treatment plan for a patient with spaced anterior teeth. Case-based learning should be incorporated to expose students to a variety of cases.<sup>[19,20]</sup> The results of our study are in agreement with those of Rock *et al.*<sup>[21]</sup> according to whom though students have good levels of basic orthodontic

knowledge but are less successful when asked to apply that knowledge to clinical situations.

If the knowledge of the dental interns was less with the commonly provided specialty treatment, the management of complex clinical conditions would be difficult. Hence, it is suggested that interdisciplinary approach toward management of patients, from the undergraduate level, is very essential.

The present study was conducted using case scenarios to assess application level in the cognitive domain, rather than recall level. This assessed the knowledge, as well as their analytical and logical reasoning.

The limitations of our study were that as it was conducted only in two dental institutions of the same region hence the results of the study should be interpreted with caution. However, these results can serve as a baseline data. Further studies should be carried out to assess the knowledge of dental interns across different dental institutes.

Interdisciplinary training that considers treating the patient as a whole or comprehensively is required. This should be undertaken only after the student has the basic knowledge regarding what each specialty is all about. An interdisciplinary approach with specialists from various disciplines of dentistry is necessary for the extensive rehabilitation of complex cases. A separate panel of specialists may be formed in every dental institution to undertake the above-mentioned task so that the graduates can be trained to handle complicated cases once they start their practice as a general dentist. Interns should be posted in the Department of Comprehensive Dental Care.

Awareness regarding “Interdisciplinary Education” must be created in the dental faculty, and its importance stressed by carrying out changes in the curriculum. The dental curriculum should be designed in such a way that the students could render comprehensive dental treatment.

## CONCLUSION

At present, the scenario is such that the dental interns are providing treatment, but it is based on the knowledge that is compartmentalized. This study revealed students have the highest knowledge in the general domain followed by endodontic domain, orthodontic domain, and least in the prosthodontic domain. There is an urgent need to develop the dental curriculum for interns training based on the concept of interdepartmental co-ordination.

## Acknowledgments

The authors would like to acknowledge Dr. Gunnar Carlsson, Dr. K. Chandrasekharan Nair, Dr. Gopichander, Dr. Raghavendra Adki, and Dr. Banashree Sankeshwari for inputs in preparing the questionnaire; Dr. Suresh Sajjan, Dr. N. S. Azhagarasan, Dr. Munirathnam Naidu, Dr. B. Sivapathasundharam and Dr. Sanath Shetty, Dr. Umesh Wadgave, and Dr. Meghashyam Bhat for inputs in the manuscript.

## Financial support and sponsorship

Nil.

## Conflict of interest

There are no conflict of interest.

## REFERENCES

1. Spear FM, Kokich VG. A multidisciplinary approach to esthetic dentistry. *Dent Clin North Am* 2007;51:487-505.
2. Elangovan S, Allareddy V, Singh F, Taneja P, Karimbux N. Indian dental education in the new millennium: Challenges and opportunities. *J Dent Educ* 2010;74:1011-6.
3. Vasanthakumar AH, D'Cruz AM. Opinion of Indian undergraduate clinical students regarding the five-year BDS curriculum. *SRM J Res Dent Sci* 2014;5:82-6.
4. Vivek V. Challenges to dental education in India. *Health Sci* 2012;1:1.
5. Shah P. Optimizing esthetics and function through interdisciplinary dentistry. *Gen Dent* 2008;56:268-72.
6. Mattheos N, Storrs M, Foster L, Oberholzer T. Intraprofessional, team-based treatment planning for oral health students in the comprehensive care clinic. *J Dent Educ* 2012;76:1589-99.
7. Jivraj S, Corrado P, Chee W. An interdisciplinary approach to treatment planning in implant dentistry. *Br Dent J* 2007;202:11-8.
8. Klineberg I. Prosthodontics – Where to now? *Int J Prosthodont* 1999;12:381-2.
9. Shetty S. Team approach. *J Interdiscip Dent* 2011;1:79.
10. Shah P. A collaborative approach to patient care: Keys to success. *Can J Restor Dent Prosthodont* 2011;4:28-33.
11. Kan JY, Rungcharassaeng K, Fillman M, Caruso J. Tissue architecture modification for anterior implant esthetics: An interdisciplinary approach. *Eur J Esthet Dent* 2009;4:104-17.
12. Pyle MA, Stoller EP. Oral health disparities among the elderly: Interdisciplinary challenges for the future. *J Dent Educ* 2003;67:1327-36.
13. Lawshe CH. A quantitative approach to content validity. *Pers Psychol* 1975;28:563-75.
14. Rungtusanatham M. Let's not overlook content validity. *Decis Line* 1998;29:10-3.
15. Rafter ME, Pesun IJ, Herren M, Linfante JC, Mina M, Wu CD, *et al.* A preliminary survey of interprofessional education. *J Dent Educ* 2006;70:417-27.
16. Slavicek G, Makarevich A, Makarevich I, Bulatova K. Concepts, aims, and drawbacks in interdisciplinary dentistry: Results of an international questionnaire. *J Interdiscip Dent* 2013;3:91-102.
17. Shetty VB, Shirahatti RV, Pawar P. Students' perceptions of their education on graduation from a dental school in India. *J Dent Educ* 2012;76:1520-6.
18. Arena G, Kruger E, Holley D, Millar S, Tennant M. Western Australian dental graduates' perception of preparedness to practice: A five-year follow-up. *J Dent Educ* 2007;71:1217-22.
19. Richards PS, Inglehart MR. An interdisciplinary approach to case-based teaching: Does it create patient-centered and culturally sensitive providers? *J Dent Educ* 2006;70:284-91.
20. Garvey MT, O'Sullivan M, Blake M. Multidisciplinary case-based learning for undergraduate students. *Eur J Dent Educ* 2000;4:165-8.
21. Rock WP, O'Brien KD, Stephens CD. Orthodontic teaching practice and undergraduate knowledge in British dental schools. *Br Dent J* 2002;192:347-51.

## APPENDIX

### Appendix 1: Perception and Knowledge of dental interns toward interdepartmental coordination for successful prosthodontic treatment-a pilot study

Part A: Questions related to perception of dental students toward interdisciplinary approach in prosthodontics

1. Presently do you feel you lack training in an interdisciplinary approach to dentistry?
  - a. Yes
  - b. No
2. Do you feel the curriculum should be designed such that you receive training for an interdisciplinary approach to dentistry?
  - a. Yes
  - b. No
3. Do you feel that specialist from different specialty should be posted in one interdisciplinary department?
  - a. Yes
  - b. No
4. Do you think you are confident in treating a patient as a whole/comprehensively?
  - a. Yes
  - b. No

Part B: Questions related to knowledge of dental students toward interdisciplinary treatment modalities in prosthodontics

5. What is your outlook regarding oral prophylaxis being carried out before any prosthodontic treatment (except complete denture)?
  - a. Not important at all
  - b. Important for some patients
  - c. Important for all patients
6. What is your outlook regarding laboratory communication being carried out before any prosthodontic treatment ?
  - a. Not important at all
  - b. Important for some patients
  - c. Important for all patients
7. What would be your sequence of treatment for a patient who reports to you with carious teeth, root stumps, and missing teeth?
  1. Extraction of the root stump
  2. Restoration of the carious teeth
  3. Replace the missing teeth
    - a. 1, 2, and then 3
    - b. 1, 3, and then 2
    - c. 3, 2, and then 1
    - d. 3, 1, and then 2

8. What would be your line of treatment for a patient aged 20 years who reports to you with missing 36 and crowding of teeth in the mandibular anterior region?
  - a. Directly proceed for replacement of missing 36
  - b. Consult an orthodontist to correct crowding and then discuss regarding replacement of missing 36
9. The design of a removable partial denture plays an important role for the (future) periodontal health. True/False
10. Periodontal health is of paramount importance for all teeth, both sound and restored. True/False
11. Oral hygiene instructions can be neglected in fixed prosthodontic treatment. True/False
12. All TMJ problems are due to occlusal discrepancies. True/False
13. How important do you think are radiographs of abutment teeth for replacement of missing teeth?
  - a. Not important at all
  - b. Important for most patients
  - c. Important for all patients
14. A patient aged 25 years reports with endodontically treated 47. Radiographic examination reveals impacted 48. How do you proceed?
  - a. Advise disimpaction of 48 and then proceed for crown with 47
  - b. Directly proceed for crown with endodontically treated 47
15. A patient aged 30 years comes with missing 11. Examination reveals that the patient has a severe deep bite. What would be your line of treatment?
  - a. Proceed for replacement of missing 11
  - b. Consult an orthodontist to correct the severe deep bite and then proceed for replacement of missing 11
16. A patient with all missing teeth comes for a complete denture. Intraoral examination reveals that patient has a white patch on the buccal mucosa regarding which he is not aware. How would you proceed?
  - a. Diagnose and treat the white lesion before proceeding for complete denture
  - b. Ignore the white patch and proceed for complete denture
17. Is it necessary to make routine blood investigations like blood sugar and complete hemogram compulsory for patients above 40 years of age?

- a. Yes
  - b. No
18. A partially edentulous patient comes for replacement of missing teeth. Examination reveals a mandibular Kennedy's Class I situation with supra erupted maxillary posteriors with deep caries. How do you proceed?
- a. Endodontic consultation and management of supra erupted maxillary posteriors
  - b. Proceed for replacement of missing teeth
19. Whether all endodontically treated teeth should be prepared to receive crown irrespective of the tooth structure?
- a. All the endodontically treated teeth should be prepared to receive crown
  - b. Anterior teeth with access opening done through the lingual fossa not involving the proximal walls with sound dentin remaining should be prepared to receive crown
  - c. Posterior teeth with access opening done through the occlusal surface involving the proximal surfaces should be prepared to receive crown
20. Whether for all resorbed ridges we should go for ridge augmentation surgery?
- a. Yes
  - b. No
21. If a completely edentulous patient reports with prominent genial tubercle what would be your first line of treatment?
- a. Surgical
  - b. Relieve
22. A completely edentulous patient reports with bilateral tuberosity undercuts and an anterior undercut. What would be your line of treatment?
- a. Surgically remove the anterior undercut
  - b. Surgically remove both the posterior tuberosity undercuts
  - c. Surgically remove all the undercuts
  - d. Relieve one tuberosity undercut and change the path of insertion
23. If a 40-year-old patient with spaced anteriors and good periodontal health reports for the closure of spacing how would you proceed?
- a. Proceed for orthodontic space closure
  - b. Proceed for diagnostic wax-up and space closure
24. Comment on the use of post and core in endodontically treated teeth
- a. All endodontically treated teeth need a post and core
  - b. All endodontically treated teeth do not need a post and core