

Study Guide

OF PEDODONTICS

For BDS 4<sup>th</sup> Year



#### MESSAGE FROM THE PRINCIPAL AVICENNA DENTAL COLLEGE



Prof.Dr.Sohail Abbas Khan {MDS, Dip Op (Hons) BDS}

It is a matter of immense honour and privilege as the first Principal of Avicenna Dental College to welcome you to prospectively one of the finest dental institutes in the private sector of Pakistan. Avicenna Dental College is a private dental college, which aims to provide the finest dental education to dental undergraduate student in accordance with the latest trends in Medical Education, and to develop them to practice dentistry in the 21<sup>st</sup>century.

While educating dental students to become licensed, empathetic and competent professionals, Avicenna Dental College endeavours to educate students in a supportive environment in which they provide dental care for a diverse populace. In the times to come, we wish to transform our graduates

into unfeigned teachers, researchers and consultants by starting postgraduation programs as well.

Avicenna Dental College aims to achieve an enterprising curriculum integrating the basic sciences with clinical experience while utilizing modern technological modalities.

In addition to the production of outstanding oral health professionals, we at Avicenna Dental College recognize our responsibility as a private dental institution to the citizens of the country in making the provision of oral the provision of oral health care available to those who are deprived of ready access.

I feel proud to lead this dental establishment such an inspiring time and hope all of you at Avicenna Dental College will share this pride and play your respective roles in materializing the dream of making this institution the premier dental educator in Pakistan.

#### MESSAGE FROM THE HOD, OPERATIVE DENTISTRY AVICENNA DENTAL COLLEGE



Prof.Dr.Sohail Abbas Khan {MDS, Dip Op (Hons) BDS}

The Department of Operative Dentistry of Avicenna Medical and Dental College is one of the largest departments of faculty of Dentistry. It provides an important role in the College of Dentistry establishing the foundational concepts of dentistry to the pre-doctoral dental students in caries diagnosis, prevention, repair and restorative techniques. The primary focus of the Department of Operative Dentistry's to provide the knowledge, technical skills, critical thinking and judgment for the diagnosis, prevention, and management of dental caries, non-carious dental defects (attrition, abrasion, erosion, abfraction, developmental abnormalities, discoloration, and trauma), and elective esthetic smile enhancements. The department is responsible for four clinics namely restorative, endodontic, crown and bridge and pedodontics. The department also carries out the preclinical training/ lectures

of 2-year BDS in restorative dentistry and clinical training /lectures of 3'd year BDS and final year BDS in operative dentistry.

All full-time faculty in the Department of Operative Dentistry have advance training in Operative Dentistry faculty is recognized for their teaching, research and clinical expertise. In addition, there are excellent clinical facilities for the development of clinical techniques and for clinical research. We also have Phantom Head lab for preclinical restorative techniques These laboratories and clinical areas are routinely used by the faculty and the graduate students as well as by a selected number of pre-doctoral students.

#### PHANTOM HEAD LAB

In Avicenna Dental College one unique provision is the phantom head laboratory which plays a pivotal role in gradually

introducing dental students to the structure of human anatomy with special focus on teeth, orientation of a dental workstation as well as patient and doctor posture and positioning. Phantom Heads are sophisticated, life-like manikins which allow rehearsal of dental procedures. With the help of these models, students can practice techniques at an early stage of their training without putting patient safety at risk. All Faculty designated for the department is fully trained and equipped to train and demonstrate to students everything required to restore, preserve a tooth without putting real patients' teeth at risk.

Sr.no.	Contents	Learning objectives
Sr.no.	Behavioural guidance of a child patient	Students should be able to have a clear concept  of:  • Emotional development  • Anger  • Fear  • Adaptive changes seen in children Factors influencing child's behavior  • Parent counseling  • Child parent separation  Classification of child's behavior  • Behavioural guidance/shaping  • Tell-show-do technique  • Desensitization  • Modelling  • Contingency management  • Distraction
		<ul> <li>Audioanalgesia</li> <li>Voice control</li> <li>Hypnodontics</li> <li>Coping</li> </ul>

		• Relaxation HOME technique
		Students should be able to define following: • Etiology
		Preventive factors
		• Role of saliva
		• Diagram
		• Plaque Diet
		Epidemiological studies
2	Dental Caries and its management	Protective factors
		Mechanism of dental caries
		Microscopic structure
		Area susceptibility
		<ul> <li>Caries classification</li> </ul>
		<ul> <li>Preventive management</li> </ul>
		<ul> <li>Restorative management</li> </ul>
		Fluorides

		<ul> <li>Caries diagnosis</li> <li>Cavity preparation</li> <li>Cavity classification</li> <li>Amalgam restoration</li> <li>Matrices</li> </ul>
3	Pulp therapy	• Primary and permanent pulp Classification of pulpal diseases • Periradicular diseases • Diagnosis • Types of pulp therapy Management techniques • Calcium hydroxide • MTA • Pulpotomy Partial pulpotomy • Pulpectomy • Obturation of deciduous root canals • Evaluation of success Follow-up

		<ul><li>Apexogenesis</li><li>Apexification</li><li>Pulp regeneration</li></ul>
Sr.no.	Contents	Learning objectives
1.	Behavioural guidance of a child patient	Students should be able to have a clear concept of:  • Emotional development • Anger • Fear • Adaptive changes seen in children Factors influencing child's behavior • Parent counseling • Child parent separation

3	Students should be able to define:  • Primary and permanent pulp  Classification of pulpal diseases
	<ul> <li>Epidemiological studies</li> <li>Protective factors</li> <li>Mechanism of dental caries</li> <li>Microscopic structure         <ul> <li>Area susceptibility</li> <li>Caries classification</li> <li>Preventive management</li> </ul> </li> <li>Restorative management         <ul> <li>Fluorides</li> <li>Caries diagnosis</li> <li>Cavity preparation</li> <li>Cavity classification</li> <li>Amalgam restoration</li> <li>Matrices</li> </ul> </li> </ul>

Sr.no.	Contents	Pulp regeneration  Learning objectives
		<ul><li>Apexogenesis</li><li>Apexification</li></ul>
		Follow-up
		Evaluation of success
		Obturation of deciduous root canals
		Partial pulpotomy  • Pulpectomy
		Pulpotomy  Partial pulpotomy
		• MTA
		Calcium hydroxide
		Management techniques

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		Mechanism of dental caries
		Microscopic structure
		Area susceptibility
		• Caries classification
		Preventive management
		Restorative management

		Fluorides
3	Pulp therapy	• Primary and permanent pulp Classification of pulpal diseases • Periradicular diseases • Diagnosis • Types of pulp therapy Management techniques • Calcium hydroxide • MTA • Pulpotomy Partial pulpotomy • Pulpectomy • Obturation of deciduous root canals • Evaluation of success

		Follow-up  • Apexogenesis  • Apexification Pulp regeneration
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1.	Behavioural guidance of a child patient	Students should be able to have a clear concept of:  • Emotional development • Anger • Fear • Adaptive changes seen in children Factors influencing child's behavior • Parent counseling • Child parent separation

2	Dental Caries and its management	Students should be able to define following:
		<ul> <li>Behavioural guidance/shaping</li> <li>Tell-show-do technique</li> <li>Desensitization</li> <li>Modelling</li> <li>Contingency management</li> <li>Distraction</li> <li>Audioanalgesia</li> <li>Voice control</li> <li>Hypnodontics</li> <li>Coping</li> <li>Relaxation</li> <li>HOME technique</li> </ul>
		Classification of child's behavior

3	Pulp therapy	Students should be able to define:  • Primary and permanent pulp Classification of pulpal diseases • Periradicular diseases • Diagnosis • Types of pulp therapy
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Management techniques
Calcium hydroxide
• MTA
• Pulpotomy
Partial pulpotomy
• Pulpectomy
<ul> <li>Obturation of deciduous root canals</li> </ul>
• Evaluation of success
Follow-up
• Apexogenesis
• Apexification
Pulp regeneration