

RGUHS has approved our department for one year Fellowship programme in Aesthetic dentistry from 1st January 2009

COURSE CURRICULUM FOR AESTHETIC DENTISTRY

Esthetic Dentistry is actually the fourth dimension in clinical dentistry. In addition to biologic, Physiologic, and mechanical factors, all of which must be understood in order to achieve a successful clinical result. Comprehensive Patient treatment can be counteracted only if relationships of various treatment modalities have been established.

CONSERVATIVE

- Human Anatomy – Face muscles, Symmetry of Face, Face analysis, dimensions of face as applied to aesthetic dentistry.
- Esthetic and its relationship to function – Dental anatomy of the Permanent teeth, Physiology of occlusion, Mastication, occlusal loading, clinical aspects of bioaesthetic functions.
- Structural esthetic rules.
- Fundamentals of esthetic – Light and shadow, the principals of colour – hue, chroma, value, opacity, translucency, depth.
- Principle of form – illusion, law of face, alteration of face.

ADHESION

- Basic concept of adhesion, Enamel Adhesion, Dentin Adhesion
- Development of dentin bonding systems, clinical factors in dentin adhesion.
- Types of esthetic restorative materials such as composites, compomers, flow able composites, ceramic – material aspect- composition properties, manipulation, insertion, finishing and polishing of restoration.
- Direct composite restoration – indications, contraindications, advantages, disadvantages, clinical procedure of restorations of teeth with composite , class III, class V Angle build up, conservative – alteration of tooth contours and contacts – alteration of shape of embrasure and correction of diastema.
- Direct Posterior composite restoration – class I, class II, - cavity preparation, restoration techniques.
- Indirect posterior composite restoration – inlay, onlay, tooth preparation, fabrication, cementation.
- Porcelain laminate veneer - advantages, disadvantages, indication , contraindication, clinical procedures for tooth preparation , gingival retraction, impression taking, shade selection, laboratory procedure for the fabrication of veneers (Die making the master cast, working cast, firing, glazing, etching of the fitting surface, trying cementation and finishing.
- Cast ceramic lamination system.
- Composite veneer – Direct method, tooth preparation, techniques of restoration.
- Veneer for indirect restoration.
- Repair of Veneer.

CLINICAL WORK TO BE CARRIED OUT

Conservative type of restoration	Performed independently	Performed under supervision	Assisting	Observation
1) Anterior composite restoration, class III, angle build up, Diastema closure, shaping and contouring of teeth.	20			
2) Laminate veneers, direct and indirect composite veneers.	5			
3) Ceramic Veneers	5			
4) Direct Posterior composite restorations.	10			
5) Bleaching (vital and nonvital)	5			
6) Demonstration of post and core for anterior teeth				5
7) Anterior jacket crown	5			
8) Posterior PFM				2

- Basic consideration in full coverage restorations, indications, contraindications, tooth preparation techniques, gingival tissue management, impression, provisional restoration, lab procedure, try in, cementation of ceramic jacket crown and bridge.
- Aesthetic gerodontics, endoesthetic, post and core, laboratory procedures.

6. Removable prosthesis, aesthetics, impression making, impression materials, laboratory procedures.

7. Over Dentures – treatment options for decimated dentition.

8. Immediate replacement prosthesis.

9. Esthetics and implants.

10. Gingival Veneers.

11. Esthetic aspects in complete denture prosthesis – impression, jaw relation, teeth selection, and arrangement, denture characterization

Students should be posted on rotation as follows for case discussion and treatment planning 6 months – Conservative, 3 months – Prosthodontics, 1 month – Periodontics.

Prosthodontics type of restoration	Performed independently	Performed under supervision	Assisting	Observation
1) Complete denture removable prosthesis.		2		5
2) Immediate removable prosthesis		1		2
3) Maryland bridge				2
4) Resin bonded fixed partial denture				2
5) Implant supported anterior replacement				2
6) Cast Partial denture			2	2
7) Anterior ceramic bridge (fixed prosthesis)	1	2	2	2
8) Anterior ceramic crown (all ceramic and full ceramic)	3			

Periodontal type of restoration	Performed independently	Performed under supervision	Assisting	Observation
1) Scaling and Root Planning	5			
2) Gingivectomy	2			
3)Gingivoplasty	2			
4) Crown lengthening				5
5) Depigmentation	2			
6)Soft tissue graft				5
7) Papillary graft				5

SCHEME OF EXAMINATION

There shall be a university examination at the end of one calendar year which includes theory, Practicals and vivavoce.

Scheme of theory paper

These shall be one theory Paper of 3 hrs duration of 100 marks.

Long essay – 2*15 mks = 30 (1 from Conservative dentistry and 1 from Prosthodontics)

Short essays - 5*10 = 50 (3 from conservative dentistry including Dental Materials and other 2 from Prosthodontics and Periodontics each)

Short answers - 2*10 = 20 (5 from conservative dentistry including Dental Materials and other 5 from Prosthodontics and Periodontics)

Practical exams One day examination carrying 100mks

There shall be 1 external examiner and 2 internal examiners (outside university) PG teacher at the rank of professor who is actively engaged in PG teaching is eligible to become the examiner.

Out of the 2 internal examiners 1 shall be from conservative dentistry and endodontics and the other from Periodontics. One external examiner shall be from Prosthodontics.

Exercise 1 – Management of Anterior discolored vital or non vital tooth for PFM crown
50 mks

(Marks carry for case selection, tooth preparation, gingival retraction, impression making and cementation of temporary crown)

Exercise II Case Presentation and Discussion 25 mks

Viva voce 25 mks

Criteria for Passing: - The candidate should secure 50% in university theory examination and 50% in clinicals and viva voce together

Successful candidate will be awarded Fellowship in Aesthetic Dentistry approved by RGUHS

- Basic consideration in full coverage restorations, indications, contraindications, tooth preparation techniques, gingival tissue management, impression, provisional restoration, lab procedure, try in, cementation of ceramic jacket crown and bridge, Aesthetic gerodontics, endoesthetic, post and core, laboratory procedures.

6. Removable prosthesis, aesthetics, impression making, impression materials, laboratory procedures.

7. Over Dentures – treatment options for decimated dentition.

8. Immediate replacement prosthesis.

9. Esthetics and implants.

10. Gingival Veneers.

11. Esthetic aspects in complete denture prosthesis – impression, jaw relation, teeth selection, and arrangement, denture characterization

AESTHETIC PERIODONTAL THERAPY: 10 hours

PERIO AESTHETIC INCLUDES:

- Aesthetic osseous surgery
- ✓ Periodontal prosthetic consideration
- ✓ Aesthetic crown lengthening
- ✓ Aesthetic surgical corrections

D) Cosmetic treatment of maxillary anterior pocketing

- Papilla preservation flap ✓

- Curtain procedure

II) Depigmentation ✓

III) Ridge augmentation*

IV) Treatment of gummy smile.

Friday

• Coverage of denuded root surface ✓

- Clinical orthodontic periodontic appliances
 - a) Aesthetic orthodontic appliances
 - b) Gingival marginal discrepancies
 - c) Missing papilla
 - d) Gummy smile
- Aesthetic and drug induced gingival enlargements
 - ~~a) Gingivoplasty~~
 - ~~b) Gingivectomy~~
 - c) Flap surgery

• Aesthetic and drug induced gingival enlargements

- a) Gingivoplasty
- b) Gingivectomy
- c) Flap surgery

- Single unit implant in aesthetic areas.

PROSTHODONTICS

1. Esthetics in Dental Prosthesis:

- Symmetry
- Proportion
- Dominance
- Cosmetics
- Esthetics in region of oral cavity
- Principals of esthetic integration
- Morphological integration
- Biologic integration
- Functional integration

PRINCIPLES OF ESTHETIC SETUP

- Facial analysis
- Clinical approaches to restoration of VDO
- Integration of mandibular anterior segment
- Integration of posterior segment
- Posterior occlusal plane and increase of VDO
- Integration of anterior and posterior occlusal planes
- Integration to maxillary anterior segment
- Functional integration of maxillary anterior segment.

2. Diagnosis and treatment planning of esthetic problems

3. Metal ceramic crowns – indications, tooth preparations, finishing lines, position of incisal edge of the preparation, margin design – metal collar, metal feather edge, porcelain margin.

4. All ceramic crowns and foil crowns

- Ceramic jacket crowns
- Glass ceramic crown
- Leucite reinforced porcelain
- Injection – molded glass – ceramic
- In – cream
- Indications, selection of crown systems, esthetic performance tooth preparation and finish lines.

5. Crown and bridge – All ceramic, modified metal ceramic restorations, current ceramic systems.

- Basic consideration in full coverage restorations, indications, contraindications, tooth preparation techniques, gingival tissue management, impression, provisional restoration, lab procedure, try in, cementation of ceramic jacket crown and bridge.
- Aesthetic gerodentics, endoesthetic, post and core, laboratory procedures.

6. Removable prosthesis, aesthetics, impression making, impression materials, laboratory procedures.

7. Over Dentures – treatment options for decimated dentition.

8. Immediate replacement prosthesis.

9. Esthetics and implants.

10. Gingival Veneers.

11. Esthetic aspects in complete denture prosthesis – impression, jaw relation, teeth selection, and arrangement, denture characterization

Students should be posted on rotation as follows for case discussion and treatment planning 6 months – Conservative, 3 months – Prosthodontics, 1 month – Periodontics

Prosthodontics type of restoration	Performed independently	Performed under supervision	Assisting	Observation
1) Complete denture removable prosthesis.		2		5
2) Immediate removable prosthesis		1		2
3) Maryland bridge				2
4) Resin bonded fixed partial denture				2
5) Implant supported anterior replacement				2
6) Cast Partial denture			2	2
7) Anterior ceramic bridge (fixed prosthesis)	1	2	2	2
8) Anterior ceramic crown (all ceramic and full ceramic)	3			

IMPLANTOLOGY

8.1.6

PRE-CLINICAL WORK-

SURGICAL PHASE-

1. Incision techniques on models
2. Raising of flaps on models
3. Suturing techniques on models
4. Surgical placement of implants on dummies using various systems
5. Radiographic assessment –OPG, CT scan

PROSTHETIC PHASE-

1. Fabrication of stents
2. Mock preparation
3. Impression technique
4. Various components (identifying)
5. Pouring casts
6. Implant maintenance on models

Teaching hours –

Didactic Lectures	- 100 hrs
Seminars	- 100 hrs
Clinics	- 300 hrs
Practicals	- 100 hrs

CLINICAL QUOTA-

<u>Implants to be placed</u>	<u>Number</u>
a)Mandibular implant retained over-dentures	2
b)Single tooth replacement	2

4) Resin bonded fixed partial denture				2
5) Implant supported anterior replacement				2
6) Cast Partial denture			2	2
7) Anterior ceramic bridge (fixed prosthesis)	1	2	2	2
8) Anterior ceramic crown (all ceramic and full ceramic)	3			

3

3

Periodontics

Periodontal type of restoration	Performed independently	Performed under supervision	Assisting	Observation
1) Scaling and Root Planning	5 ✓			
2) Gingivectomy	2 ✓	2 ✓		
3) Gingivoplasty	2 - (1)	(3)		
4) Crown lengthening				5
5) Depigmentation	2 (1)			
6) Soft tissue graft				5
7) Papillary graft Frenotomy				5

3 case history.

Scheme of Examination:

A. Theory: 100 Marks

Distribution of Topics and Type of Questions

Contents	Type of Questions and Marks	Marks
One Long Essay from Conservative topics One Long Essay from Prosthodontics topics	Long Essays 2 X 15 marks	30
Three questions from Conservative & Dental Materials. One question from Prosthodontics and One question from Periodontics	Short Essays 5 X 10 Marks	50