

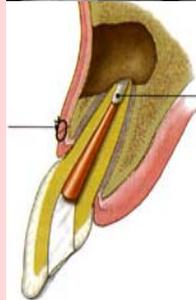
**THE SAUDI COMMISSION FOR
HEALTH SPECIALTIES**



**THE SAUDI
SPECIALITY
CERTIFICATE IN
ENDODONTIC
PROGRAM
[SSC-Dent (Endo)]**



**PREPARED BY:
*THE SCIENTIFIC COMMITTEE
OF THE PROGRAM***



OCTOBER 2007

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I. INTRODUCTION

The Saudi Specialty Certificate in Endodontics [SSC-(Dent) Endo] is the branch of dentistry, which is concerned with the morphology, physiology, and pathology of the human dental pulp and periradicular tissues. Its studies and practice encompass the basic clinical sciences, including biology of the normal pulp, the etiology, diagnosis, prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions.

The program extends for four years and it has been designed to satisfy the needs of those who wish to acquire greater skill, knowledge, and experience in clinical Endodontics, as well as a background in biological sciences. The program includes participation in formal lectures, seminars, book and literature reviews.

II. PROGRAM GOALS AND OBJECTIVES

1. Develop skillful clinicians capable of delivering advanced or complex endodontic care at a high level of quality and sophistication.

- To provide the residents with a sufficiently large number of diagnostic, non surgical, surgical and post operative evaluation experiences to develop proficiency in the practice of endodontics.

- To prepare the residents to effectively treat and manage medically compromised patients.

- To provide the residents with formal and informal opportunities to present, discuss and defend their clinical cases with endodontic supervisor, other program supervisor and student colleagues during Monthly Case Presentation.

2. Establish a sound basis for the practice of endodontics.

- To provide the residents with an in-depth knowledge of relevant basic/biomedical sciences as they relate to the theory and practice of endodontics.

3. Develop fundamental research skills and an interest in and understanding of endodontic research in order to evaluate published clinical and scientific papers.

- To train the residents in the fundamentals of research methodology, study design, biostatistics, data organization and analysis, scientific writing and presentation.

- To provide the residents with the opportunity to conduct and publish research.

4.Satisfy the formal clinical requirements necessary to enter the Part II Examination of the Endodontic Program.

5.Create the desire and sense of obligation and responsibility to contribute to the perpetuation and growth of endodontics by mentoring teaching.

- To provide the residents with the training and opportunity to teach and educate pre and post doctoral students.

III. PROGRAM TRAINING CENTERS

The sponsor of Saudi Specialty Certificate in Endodontic is an institution which has an over-all administrative control and responsibility for conducting the program. Government or a private training center can be accepted for training after being accredited by the Saudi Commission for Health Specialties (SCHS) as either a full training center or partial training center. A committee according to the standard classification carries out the recognition procedure and rules set by the SCHS as follows:

- ❖A training center must provide a readily accessible facility for dental treatment of all patients.

- ❖The training center must provide resources sufficient for resident training.

- ❖If a full or partial training center lacks adequate facilities, patient's caseloads, or any other resources needed by the educational program, it must supplement its resources through affiliations with other institutions. Affiliated hospitals or dental departments or centers in which residents receive a substantial portion of their training must be accredited by SCHS.

- ❖Residents assigned to specific training center must have clinical privileges and are subject to the rules and regulations of the training center.

IV. ADMISSION REQUIREMENTS

Applicants seeking admission into the SSC-Dent (Endo) training program should fulfill the following requirements.

- Accredited a bachelor of Dental Surgery degree (BDS) or equivalent from a recognized university.
- Successful completion of an internship year in general dentistry (12 months).
- Passed the competitive selection examination process set by the SSC-Dent (Endo) program.
- Provision of at least three confidential recommendation letters from three different consultants [as to the suitability of the applicant for training in SCC Dent (Endo) program]which must include one letter from the candidate's immediate supervisor.
- Letter of no objection from the applicant's sponsor indicating that the applicant can be in a full time training program for the entire period of 4 years.
- Applicant should be registered in the Saudi Commission for Health Specialties as a trainee.
- Applicants should pay the application and training fees.
- Signed obligation to abide by the rules and regulations of the training program and the SSC-Dent (Endo).

V. PROGRAM CONTENTS

The SSC Dent (Endo) Program extended for a period of Four years in which the didactic clinical sciences and advanced clinical training are integrated into the program duration. Description for the Didactic Basic Science courses, list of the Endodontic Specialties courses, books, literature review and Endodontic Clinical Training can be summarized in the following:

A. Didactic of Basic Sciences Courses

1. Oral Pathology (R1)

This course is designed to provide a broad review of the major pathologic processes that affect the oral and maxillofacial areas.

2. Oral Microbiology and Immunology (R1-R2)

The purpose of this course is to provide a comprehensive review related topics in oral microbiology relevant to oral infections and diseases for residents in SSC-(DENT) Endo program;

Topics will include but not limited to:

- Normal microbial flora of the mouth
- Bacterial classification
- Microbiology in Dental caries
- Microbiology in Periodontal disease
- Principle of oral and mucosal immunology

3. Applied Head and Neck Anatomy (R1)

This course provides the resident with the necessary knowledge of head and neck anatomy, which involves the anatomy of the skull, face, oral and nasal cavities. The course includes the study of musculatures, internal organs of head and neck, lymphatic drainage, blood supply, and enervation.

4. Advanced Oral Biology (R1)

The purpose of this course is to provide a survey of selected topics in oral biology relevant to oral structures, functions and diseases for residents in SSC-(DENT) Endo Program. Topics will include but not limited to:

- Salivary glands and saliva (morphology, secretion, functions).
- Connective and mineralized tissues (collagen, proteocollagen, bone).

The relationships and response between the above topics and systemic and environmental influences.

5.Oral Histology (R1)

Seminars or lectures are designed at the post graduate level on different related topics in oral histology.

6.Pharmacology (R1, R2 & R3)

This course should provide the residents with the understanding of basic pharmacological principles such as Pharmacokinetics, Pharmacodynamics and adverse reactions. Specific drug groups of concern to Endodontics will be emphasized. Proper techniques of prescription writing will be reviewed.

7. Dental Ethics (R1)

The prime goal of this course is to promote the resident's education in dental ethics. This course will cover the related issues ranging from ordinary chairside decision making to HIV/AIDS and ethical practices. This course will guide the residents to an understanding of the essential practice of ethics. This course will stress on the necessity of awareness of legal process and civil law, forensic dentistry, the practitioner and other related subjects.

8.Practice Management (R3-R4)

In this course different aspects of successful practice with emphasis on endodontics will be discussed. The following topics will covered: quality assessment and quality assurance, management of auxiliaries and other office personnel, maintenance and management of patients records, principle of peer review, business

management including the understanding of the third party payment and professional practice development, infection control, environmental health management, principles of professional ethics and alternative health care delivery systems.

9. Bio Statistics in Dentistry (R2-R3)

Topics covered include variables, frequency distribution, sampling measure of central tendency, variance and measure of dispersion, various statistical tests, analysis and probability.

10. Educational Methods (R2)

The residents regardless of their future professional expectations will be exposed to the method of teaching, curriculum development, and instructional objectives, instructional media, audio-visual teaching and learning aids and assessment methods for knowledge, skills and attitude.

11. Research Design and Scientific Writing (R2, R3 &R4)

Emphasis will be made on the various methods of research design, in addition to the ethical aspects of research on animals and humans. The resident shall learn to write a protocol for a research project, interpret own research findings, and present research findings, in oral and written form.

12. Oral Medicine (R1)

The course will cover several aspects of general patient assessment and management. This will include data collection, analysis, diagnosis, prognosis and treatment planning. Also, it will include brief management of some common oral soft and hard tissue condition, extra-intra, oral swelling, pre-malignant lesions, facial pain and TMJ disorders.

13. Advanced Oral and Maxillofacial Radiology (R1-R2)

This course will provide the residents knowledge of radiation physics, radiation biology, hazards and protection, advanced imaging techniques and diagnostic oral radiology.

14. Dental Biomaterials (R2)

The topics and seminars in this course will provide the resident with the knowledge necessary to properly select and handle dental materials, which is required to render quality treatment to the patient. Although, the manipulative parameters for obtaining maximum performance are continually stressed. In order to develop a basic understanding of biocompatibility, emphasis will be placed on the relationship between the

properties of dental materials and their behavior in the pulp and the periapical tissues.

15. Dental Informatics (R2)

This course will introduce the residents the basics of Information Technology.

1. Basic computer skills will help resident use computer-aided instruction software in the basic and dental sciences.
2. Word processing skills will be useful for assignments that involve writing.
3. Library and literature research skills can contribute in any discipline. Also on using computers in the dental office, it include topics on components and functions of practice management programs, computer based oral health records, digital imaging. The course focus on emerging clinical applications that will be vital to the delivery of dental care in the 21st century.

B. Specialty Courses

Endodontic Specialty Courses will be held for the residents with the senior staff members through out the four years of the program. During their training seminars and lectures; focus on basic endodontics such as Pulp Biology and advanced endodontic such as microsurgery. The following courses will cover most of Endo specialty.

1. **Pulp Biology**
2. **Traumatic Injuries**
3. **Diagnosis and Treatment Planning**
4. **Endodontic Instruments/Instrumentation and Sterilization**
5. **Cleaning and Shaping**
6. **Obturation**
7. **Endodontic Surgery**
8. **Endodontic Microsurgery**
9. **Pediatric Endodontics**
10. **Endodontic Emergencies**
11. **Periodontal – Endodontic Considerations**
12. **Preparation for Restoration and Temporization**

C. Case Presentation

The case presentation will be conducted in the form of a seminar.

The purpose of this seminar is to provide a forum in which clinical experiences can be shared and in which constructive criticism will benefit not only the presenter, but also all in attendance.

D. Book Review

The objective of this course is to review current techniques and philosophies of endodontic practice as presented in current Endodontic textbooks. The course will have a weekly seminar format in the different Training centre the recommended text books are:

- **Pathways of the Pulp** by Cohen and Burns
- **Endodontic** by Ingle
- **Textbook and Color Atlas of Traumatic Injuries to the Teeth** by Andreasen J. and Andreasen F.
- **Surgical Endodontics** by Gutmann and Harrison
- **Essential Endodontology** (Prevention and treatment of apical periodontitis) by Orstavik and Pittford:
- **Endodontology** (Biological consideration In Endodontic procedure) by Seltzer.
- **Principle and Practice of Endodontics** (Torbinjad and waltom)

E. Endodontic Literature Review

The purpose of this course is to review the classic and current literature for articles pertaining to Endodontics in a seminar format.

F. Endodontic Clinical Training

1.Pre-Clinical Training

The pre-clinical course is offered during the first three months of the Program. The course includes working on extracted teeth in the phantom laboratory and to be supervised by a consultant. In addition they have to attend the consultant's clinic before the resident will start his/her clinic. The course has a laboratory/lecture format.

It is designed to develop proficiency in a variety of endodontic instrumentation and obturation techniques before the candidate applies them in the clinical session.

The following lectures are going to be given:

1. Clinical introduction
2. Access opening and working length

- determination
- 3. Instrumentation techniques
- 4. Obturation
- 5. Endodontic re-treatment
- 6. Problem solving

2.Laboratory Exercises

In the first year Resident will demonstrate the complete instrumentation and obturation of the following extracted teeth:

- 1. Two (2) (maxillary and mandibular) central incisors
- 2. Two (2) maxillary first bicuspid (2 root)
- 3. Two (2) mandibular first molar
- 4. Two (2) maxillary first molar

3. Clinical Requirement

The following clinical procedures should be done by each Resident before graduation:

Clinical Procedure	Number of Cases
Non-surgical Endodontics:	50 anterior teeth. 50 pre-molar teeth 200 upper and lower molar 100 re-treatment cases, including cases with calcified canals, curved/long canals, unusual anatomy, etc.
Surgical Endodontics	40 cases including more than 10 molar teeth with root-end resection, root-end pre-paration and root-end fillings.
Clinical Procedure	Number of Cases
Emergency Treatment	10 cases including incision for drainage, trephination, etc.
Traumatic Dental Injuries	14 cases of different management modalities of traumatic injuries and their sequelae, such as crown/root fractures, luxations, avulsions, open apices, resorptions, etc.
Bleaching of Endodontically Treated teeth	5 cases
Others	10 other cases must be different from each other and may include, perforations, hemisections, root ampu-tations, replants, transplants, endo-perio, endo-pedo, endo-ortho,

	removal of separated instrument, decompression and vital pulp therapy (including apexogenesis)
Recall of the Finished cases	50% of cases should have at least one year recall

It is mandatory to use rubber dam for safety and avoiding cross infection. A resident who fails to apply the RD will face a strong disciplinary action.

The above requirements are expected to be finished according to the following:

- 90 teeth at the end of the 1st year
- 120 teeth at the end of the 2nd year
- 130 teeth at the end of the 3rd year
- 140 teeth at the end of the 4th year

IV. EVALUATION

A . Resident Evaluation

According to the rules and regulations of the Saudi Comissionn for Health Specialties the following evaluations should be carried out:

1. Yearly Clinical Evaluation

a. Periodic Evaluation

A periodic formal evaluation of the student during their residency program will be implemented. This is to determine whether they are meeting the qualitative and quantitative standards of the program. This consist reports of the four (4) quarters and must be submitted to local committee by the end of each quarter.

Documentation of the program progress and all resident activities must be maintained by the program director and should always be available for review.

b. Clinical Cases Evaluation

Resident should fill-out the case history report form for each clinical case to fulfill the minimum requirements. All cases should be submitted at the end of training year to the evaluating committee.

2. Yearly Promotion Examination

End year written oral exam (Promotion)

An annual comprehensive written examination on basic science and various Endodontics subjects will be held at the end of each year (100 MCQ) followed by an oral Exam on the cases.

3. Part I Examination

- Written Examination is to be held after the first year and the approval of the program scientific committee. This examination includes basic science material covered during the first year(100MCQ)

4. Part II Examination (Final)

- This examination will be held after the completion of 4 years training and fulfilling of the clinical requirements and the approval of the program scientific committee. It includes the following according to the written exam:

1. Didactic Evaluation

A comprehensive written examination on various Endodontic Dentistry subjects will have two papers

- Paper I: 2 - 3 hours duration and contain (100 – 125 MCQ).
- Paper II in all Endodontic specialty will be of 2 – 3 hours and contain a mixture of :
 - Short modified Question.
 - Question on slides.
 - Matching Question.

i. Clinical and Oral Evaluation

a. Clinical Evaluation

1. Resident should provide evidence of completing the treatment of a minimum of 480 cases during his/her training period.
2. Residents are required to submit 6 challenging cases to the examination committee, minimum of 8 weeks prior to the final exam. Examination committee will select 2 out of 6 cases submitted by the resident to be presented to the committee. The resident should be ready to present any of the 6 cases at the time of the examination.

b. Oral Comprehensive Examination

Residents will be examined extensively on the different aspect of Endodontic Dentistry during clinical oral examination.

B.Program Evaluation

The scientific committee must regularly evaluate the degree which the program goals are being met.

VII.CERTIFICATION

The successful candidate will be awarded a Certificate in the Saudi Specialty of Endodontics upon completion of all the academic and clinical requirements as well as the final specialty examination.

For more information,
please contact:

SAUDI COMMISSION FOR
HEALTH SPECIALTIES

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i. Summary of SSC Dent (Endo) Teaching Hours:

Didactic of Basic Sciences						
Course		No. of Teaching Hours				
		1st year	2nd year	3rd year	4th year	TOTAL
1.	Oral Pathology	20	-	-	-	20
2.	Oral Microbiology and Infection Control	20	10	-	-	30
3.	Head and Neck Anatomy	20	-	-	-	20
4.	Oral Biology	10	-	-	-	10
5.	Oral Histology	10	-	-	-	10
6.	Pharmacology	10	10	10	-	30
7.	Dental Ethics	10	-	-	-	10
8.	Practice Managements	-	-	10	10	20
9.	Biostatistics	-	10	10	-	20
10.	Educational Methods	-	10	-	-	10
11.	Research Design & Scientific Writing	-	10	10	10	30
12.	Pain and Anxiety	10	10	-	-	20
13.	Oral Medicine	10	-	-	-	10
14.	Oral Radiology	10	10	-	-	20
15.	Topics in Emergency Management	10	10	10	-	30
16.	Medically Compromised Patients	-	10	-	-	10
17.	Dental Informatics	-	10	-	-	10
T O T A L		140	100	50	20	310

Specialty Courses						
Course		No. of Teaching Hours				
		1 st year	2 nd year	3 rd year	4 th year	TOTAL
1.	Endodontic Literature Review	120 (40x3)*	120 (40x3)*	120 (40x3)*	120 (40x3)*	480
2.	Case Presentation	30 (10x3)***	60 (20x3)**	60 (20x3)**	60 (20x3)**	210
3.	Book Review	120 (40x3)*	120 (40x3)*	-	-	240
4.	Dental Trauma	-	10	-	-	10
5.	Endodontic Diagnosis & Treatment Planning	10	-	-	-	10
6.	Endodontic Cleaning & Shaping	10	10	-	-	20
7.	Endodontic Obturation	10	10	-	-	20
8.	Endodontic Surgery	-	-	10	10	20
9.	Endodontic Armamentarium	10	-	-	-	10
10.	Microscopic Endodontics	-	-	10	-	10
11.	Endodontic Emergency	10	-	-	-	10
12.	Restoration of Endodontically treated teeth	10	10	-	-	20
13.	Endodontic Periodontic Relationship	-	10	-	-	10
14.	Pediatric Endodontics	-	10	-	-	10
15.	Pulp Biology	10	-	-	-	10
16.	Pre-clinical Training	36 (3x6x2)	-	-	-	36
17.	Clinical Practice	684 (228x3)	720 (240x3)	720 (240x3)	720 (240x3)	2844
T O T A L		1060	1080	910	910	3960

* - 3 hours x 40 weeks ** - 3 hours x 20 weeks *** - 3 hours x 10 weeks