# THE COLLEGE OF DENTAL SURGEONS

# OF

# HONG KONG

Guidelines

for

Accreditation and Training

in

Prosthodontics

January 2001

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## **INTRODUCTION**

Prosthodontics is that discipline of Dentistry that provides diagnosis and treatment of patients of all ages with malformations or loss of tissues in the jaws or face and functional disorders of the masticatory system; and involves replacement of missing tissues with prostheses thereby restoring health, oral functions, comfort and appearance.

A registered specialist in Prosthodontics, i.e., Prosthodontist, should have the following characteristics: he/she has undergone training and assessment in Prosthodontics; the major part of his/her practice is in Prosthodontics, and he/she is currently of good standing in the Specialty of Prosthodontics.

(A description in Chinese can be seen in Appendix I)

It is our view that Prosthodontics fulfills **all** nine criteria for recognition as a specialty as laid down by the Hong Kong Academy of Medicine:

#### a) that the specialty is needed in Hong Kong

Prosthodontists can work independently in performing oral rehabilitation for patients with advanced breakdown of the stomatognathic system which are beyond the capabilities of general practitioners, and in collaboration with other specialists such as Oral and Maxillofacial Surgeons for the rehabilitation of cancer and cleft lip and palate patients.

#### b) that the specialty is new and different to existing specialties

The discipline of Prosthodontics deals with the restoration of the natural teeth and/or the replacement of missing teeth and contiguous oral and maxillofacial tissues with artificial substitutes, and is different from that managed by other existing specialties in dentistry, namely Paediatric Dentistry, Orthodontics and Oral and Maxillofacial Surgery.

c) that the knowledge base and practice involved are broad enough to constitute more than a subspecialty within another specialty

The knowledge base and practice of Prosthodontics is broad enough for the University of Hong Kong, as well as most Commonwealth and North American Dental Schools, to offer two/three years full-time postgraduate Master's degree programmes in the specialty.

## d) that such specialty exists in another country

Prosthodontics exists as a distinct discipline in most dental schools. In many countries with specialist registrations, Prosthodontics is a recognised specialty (e.g. UK, USA, EEC, Canada, Australia and Japan).

# e) that the specialty is recognised at the institutional level

There is a full-time professor, 1 associate professor and 5 assistant professors in this discipline in the University of Hong Kong. There is also 1 Honorary Consultant in Prosthodontics in the Hospital Authority of Hong Kong. In addition, the Dental Service of the Department of Health has 1 Senior Dental Officer practicing Prosthodontics exclusively.

# f) that sufficient specialists in that specialty already exist in Hong Kong to make the specialty viable

Within the Faculty of Dentistry of University of Hong Kong, nine teachers are involved in Prosthodontic teaching and specialist service. In the Hong Kong SAR, there are 26 dental surgeons with postgraduate qualifications and practice Prosthodontics actively. There is one specialist society, The Hong Kong Society of Prosthetic Dentistry, which was established in 1987 and has a current full membership of 15 and associate membership of 32.

#### g) that the specialty is viable in private practice

Internationally, Prosthodontics is viable in private practice and currently there are practitioners with postgraduate qualifications practising mostly Prosthodontics in Hong Kong.

h) that the specialty has the administrative support of one or more constituent Colleges of the Academy

The specialty of Prosthodontics has the administrative support of The College of Dental Surgeons.

i) that the major part of the postgraduate training and assessment required is unique and different to existing specialties

In parallel with other dental specialties (i.e. Paediatric Dentistry, Orthodontics and Oral and Maxillofacial Surgery), the specialty of Prosthodontics has a defined training and assessment programme within The College of Dental Surgeons of Hong Kong. In the USA, the American Board of Prosthodontics provides unique assessment for specialists in the field of Prosthodontics. The Royal Colleges of England and Edinburgh in UK have a Membership in Restorative Dentistry examination for the specialty. The Royal Australasian College of Dental Surgeons also offers an exit fellowship examination in Prosthodontics. Furthermore, The General Dental Council of United Kingdom has a specialist board for the assessment and approval of the use of the title Specialist in Prosthodontics.

#### 1. INSTITUTIONAL RELATIONSHIPS AND COMMITMENTS

Basic and Higher Specialist Training in Prosthodontics in Hong Kong should be, at present, a joint endeavour between the Faculty of Dentistry, University of Hong Kong and the Prince Philip Dental Hospital. Other training centres will be identified in the Government and the Private Sector by the Specialty Board in Prosthodontics.

Approved training centres should demonstrate a commitment to the programme with appropriate documentary evidence. Responsibilities including the provision of teaching staff, teaching and clinical facilities and adequate number of suitable patients. The contribution of each institution, the period of assignment and the financial commitment should be identified.

The programme should be recognised within the administrative and clinical structure of the institution and should be consistent with that of other internationally recognised programmes in Prosthodontics.

Centres sponsoring Basic and Higher Specialist Training in Prosthodontics must be accredited by the Education Committee of the College of Dental Surgeons of Hong Kong.

#### 2. CURRICULUM AND TRAINING REQUIREMENTS

The specialist training programme in Prosthodontics should encompass a minimum duration of 6 years, with an Intermediate Examination after 4 years, followed by 2 years of Higher Training programme leading to the Exit Examination.

The programme should comprise a comprehensive study of applied clinical sciences in a graduated sequence of clinical training appropriate to Prosthodontics.

## 2.1 CURRICULUM

The curriculum should be constructed with reference to the existing BDS undergraduate course in Hong Kong and additional requirements based upon the Intermediate Examination, as well as the requirements of the Exit Examination.

The key features of the curriculum are:

That the basic dental degree (BDS) registerable in Hong Kong is considered to be the most appropriate qualification for entering a Basic Specialist Training programme in the specialty of Prosthodontics in Hong Kong.

That admission to the Higher Specialist Training in Prosthodontics should be based upon successful completion of the Intermediate Examination.

That an integrated education process is essential, and which progresses from the undergraduate BDS level through to the graduate level. It must be designed to provide adequate knowledge in the scientific basis of Prosthodontics and training in its clinical practice at specialist level.

That the curriculum should be reviewed and revised if practice philosophies or requirements change.

Basic Specialist Training should provide:

- structured development of knowledge, skill and attitudes common to all branches of restorative dentistry,
- ii) knowledge base and clinical skills in Prosthodontics,
- iii) skills in critical appraisal of literature and research techniques.

Higher Specialist Training should:

- facilitate consolidation of knowledge and skills in the practice of Prosthodontics,
- ii) equip trainees to manage change, and help to reinforce a commitment to lifelong learning and continuing professional development.

# 2.2 SEQUENCE OF TRAINING

- 1. A basic dental degree from the University of Hong Kong or an equivalent institution approved by the College is the entry requirement for the full-time Basic Training in Prosthodontics.
- 2. In Year 1 of the training programme, the candidate is required to gain appropriate experience in general dentistry at the Prince Philip Dental Hospital, the Hong Kong Government Dental Services or other practices approved by the College.
- 3. During Year 1, the candidate is required to attend lectures, specific or continuing education courses and conferences of not less than 30 CME hours. The candidate must submit evidence of CME hours to the Specialty Board in Prosthodontics before admission to Year 2 of the training programme.
- 4. Year 2 to year 4 should be a full-time, structured, institute based training programme in Prosthodontics in approved training institutions.

- 5. Before entry into the Higher Training programme, the candidate must have successfully completed the Intermediate Examination in Prosthodontics of the College of Dental surgeons of Hong Kong, which may be a conjoint examination of Membership in Restorative Dentistry of the Royal College of Surgeons of Edinburgh with Prosthodontics as the selected field of examination or an examination mounted by the College of Dental Surgeons of Hong Kong (Appendix II).
- 6. Year 5 and 6 should be a structured Higher Training period in an approved programme at a training institute or approved practice in conjunction with a training institute.
- 7. Before accreditation as a trained specialist, the candidate, having fulfilled all other requirements of specialty training as determined by the Specialty Board in Prosthodontics, must also successfully complete an Exit Examination in Prosthodontics conducted by the College of Dental Surgeons of Hong Kong.
- 8. Final exit examination (Appendix III).

# 3. ACADEMIC DEVELOPMENTS AND RESEARCH

It is essential to maintain a University link within the training programme in Prosthodontics. This may include the acquisition of a postgraduate master degree in Prosthodontics or an equivalent degree. An Advanced Diploma in Prosthodontics is an additional achievement within the programme. These degree courses should be structured to include the basic and applied clinical science components as well as research methods and supervised clinical practice, as is currently available within the University of Hong Kong.

Trainees should develop and demonstrate an ability in critical thinking by means of critical study of the literature and conducting or participating in scientific project(s) related to Prosthodontics leading to the publication of scientific articles in international referred journals.

# 4. PROGRAMME SUPERVISION AND STAFFING

The Supervisor must be nominated by the Specialty Board in Prosthodontics and appointed by the Education Committee of the College of Dental Surgeons of Hong Kong.

The Supervisor must have sufficient authority and time to fulfil administrative and teaching responsibilities in order to achieve the educational goals of the programme. In addition, it is the Supervisor's responsibility to ensure that trainees completing the programme have achieved the standards of performance established for the programme and for the practice at a specialist level.

The actual specialty instruction and clinical supervision may be carried out by accredited trainers. It is strongly recommended that individuals, who provide instruction and supervision specific to any other specialty area, should be fully qualified in that specialty.

- **4.1** The Supervisor must ensure that the following responsibilities are properly carried out:
  - a. Selection of trainees.
  - b. Development and implementation of the curriculum.
  - c. Ongoing evaluation of programme content, teaching facility and trainees' performance.
  - d. Programme administration.
  - e. Planning and operation of facilities used in the educational programme.
  - f. Evaluation of the supervision and trainee's activities in affiliated institutions.
  - g. Maintenance of records related to the educational programme.
  - h. Responsibility for overall continuity and quality of patient care.

- **4.2** The number of the trainers and their time commitment should be sufficient to ensure:
  - a. Continuity of instruction to trainees.
  - b. Exposure of trainees to a broad range of diagnostic and treatment options.
  - c. Participation of trainers in all teaching activities, including conferences and seminars.
  - d. High quality of patient care in terms of diagnosis, treatment planning, management and outcomes of all cases treated by the trainees.
  - e. Adequate supervision of all clinical activities. The degree of supervision should be related to the ability and experience of the trainees. In the years of Higher Specialist Training, trainees should be under the immediate supervision of the trainer on a minimum of a one trainer to two trainees ratio.
- **4.3** Supervisors and trainers should have a real and demonstrated interest in teaching and practising Prosthodontics. They should provide the necessary time and effort to the educational process; and set an example by engaging scholarly pursuits such as (1) participation in continuing professional development, (2) participation in national and international Prosthodontic societies, (3) presentation and publications of scientific studies, and (4) demonstration of an interest in research.
- **4.4** Instruction and supervision within the Specialty of Prosthodontics must be conducted by individuals who are fully qualified and accredited. They should normally be Academy Fellows or persons of comparable standing.

The teaching and supervisory staff should have regularly scheduled sessions and be available for emergency consultation. There should be regular sessions for presentation of cases and participation in peer review. It is recommended that trainers be evaluated annually to determine the quality of their performance. While the Supervisor must be responsible for teaching staff evaluation, it is highly desirable that trainees also participate in this process.

- **4.5** The policy regarding privileges and responsibilities for trainees in the Higher Specialist Training programme of Prosthodontics parallels that enunciated by the other Colleges of the Academy of Medicine, namely:
  - a. Each trainee in the Higher Specialist Training programme will normally be supervised in an approved training centre in Prosthodontics. However, on the recommendation of the Specialty Board in Prosthodontics and approval by the Education Committee, 2 years of supervised practice is also acceptable.
  - b. In a supervised practice situation, the trainer and trainee need not work in the same practice. There must however be regular contacts between the trainer and the trainee in relation to: diagnosis, treatment planning, patient care, treatment evaluation, practice management and professional development. The trainee should be attached to an approved training centre for at least three sessions per week.
  - c. The Supervisor will make regular, not less than once every four months, practice visits to the trainee's practice to assess and give feedback on the practice profile, record keeping and management. The trainee is responsible to make improvements according to the feedback advice.
  - d. Supervision of trainees should be extended to all areas of Prosthodontics, including multi-disciplinary treatment undertaken in collaboration with colleagues.
  - e. Trainees in Prosthodontics should be allowed privileges commensurate with their level of training and their clinical skills.

- f. Trainers must at all times ensure that the trainees are not undertaking any activities that are beyond their level of competence.
- g. Each trainee in the Higher Specialist Training programme is required to attain a minimum of 30 CME points per year in Prosthodontics.

Clinical responsibilities of trainees should be assigned by the Supervisor, based on the following criteria:

- 1. Performance in the preceding period of training.
- 2. Documented evidence of training.
- 3. Competence in clinical judgement and techniques.
- 4. Personal reliability and responsibility.

# 5. PHYSICAL FACILITIES AND RESOURCES OF AN ACCREDITED TRAINING UNIT

Institutional facilities and resources must be adequate to provide the educational experiences and opportunities to enable fulfilment of the requirements of the programmes as specified in the guidelines. These include, but are not limited to, facilities and human resources for trainees to carry out patient care and to meet personal educational responsibilities, administrative offices, and an adequate space for instruction.

- **5.1** Clinical facilities must be properly equipped for performance of all patient care procedures relevant to Prosthodontics. Equipment and supplies for managing medical emergencies must be readily accessible and functional.
- **5.2** There must be a supply of patients in need of specialist prosthodontic care to ensure adequate exposure of the trainees to a range of diagnostic and treatment options as specified by the Specialty Board in Prosthodontics.
- **5.3** Educational resources

It is recommended that every approved training unit should contribute fully to the development of an Educational Resource Centre.

This will include:

- a. Documentation and periodic review of all existing facilities and resources related to training.
- b. Continued development and update of advanced educational materials on clinical techniques and research findings.
- c. Periodic evaluation of the log of clinical experience.
- d. Library.

# 6. CONTINUING EVALUATION OF TRAINEES

There must be documentation of progressive evaluation and the performance of trainees. The system should assure, through the Supervisor of training, that each programme:

a. Progressively assesses the accumulated log of activities, maintained by all trainees in a log book.

- b. Periodically, at least biannually, evaluates the knowledge, skills and professional development of all trainees, using appropriate criteria and procedures.
- c. Provides to trainees an assessment of the individual's performance, at least biannually. More frequent evaluations and documentation of such evaluation should be made if it is determined a trainee is found to be not properly motivated or eligible for advancement or retention in the programme. Remedial activities should be prescribed in accordance to the assessment report.
- d. Allows and encourages trainees to undertake more complex cases based on an evaluation of their competencies.
- e. Maintains a record of evaluation for each trainee, which is accessible to the trainee and available for periodic review by the Specialty Board in Prosthodontics.

# 7. ROTATIONS

Training rotations will be supported on the basis of:

- (a) Extending the clinical training and experience of the trainees as defined by the training requirements, especially where specific strengths or deficiencies are identified within respective programmes.
- (b) Promoting and developing consistent standards and co-operation between programmes.
- (c) Developing international relationship and recognition.

Rotations between accredited programmes should normally not exceed six months and be subject to prior approval of the Specialty Board in Prosthodontics.

## 8. **REVIEW**

Each programme must regularly evaluate the degree to which its goals are being achieved through internal assessment.

It is also essential that each training centre regularly submit adequate documentation of its training commitments and trainee status and experience to the Specialty Board in Prosthodontics.

修復齒科是專責診斷和以義體治療上下頜及其相關組織因先天或後天造成的功能及機能上的畸形或缺陷,使患者從而得獲健康,口腔功能,舒適及美觀。凡經註冊的修復齒科專科醫生皆為聲譽良好,已通過修復齒科的專科訓練及考核,並以修復科為其主要工作。

# **Appendix II**

#### **Intermediate Examination in Prosthodontics**

The Intermediate Examination in Prosthodontics is the major tool to objectively assess the performance and capability of trainees after the Basic Specialist Training programme. Trainees must have successfully completed the Intermediate Examination before they will be admitted to the Higher Specialist Training programme.

Examinations may include written papers, laboratory, clinical and oral examinations.

No syllabus can be comprehensive and the following outlines are not intended to be prescriptive or exhaustive. The trainees are expected to be aware of recent developments in the field of Prosthodontics. Familiarity with the literature pertinent to the practice of Prosthodontics is essential.

The scope of the examination is broadly divided into two sections;

## a. General Section

- 1. Competency in history taking, physical examination including occlusal and function analyses of patients presenting with oral and prosthodontic problems.
- 2. A good understanding of the principles of radiography including a detailed knowledge of potential hazards and appropriate safety measures and legislation.
- 3. Competency in interpreting intra-oral radiographs, orthopantomograms and computerised tomographs.

- 4. A working knowledge and experience of oral medicine, pathology and minor oral surgery related to the clinical practice of Prosthodontics together with a knowledge of the principles of maxillofacial surgery.
- 5. A detailed knowledge of preventive dentistry including the epidemiology and aetiology of dental caries and the prevention and management of periodontal disease.
- 6. A working knowledge of pain control, dental sedation and anaesthesia.
- 7. An in-depth knowledge of treatment planning including multi-disciplinary collaboration with other dental specialties.
- 8. A working knowledge of research methodology, audit, quality assurance and quality standards.

# b. Principles and Practice of Prosthodontics

1. Fixed Prosthodontics

Candidates should be familiar with the full range of clinical techniques and procedures. A good understanding of related laboratory techniques is required.

2. Removable Prosthodontics

Candidates should be familiar with the full range of techniques for complete denture and partial denture construction. Knowledge and experience in preprosthetic management of patient is also required.

3. Maxillofacial Prosthodontics

Candidates should have a detailed knowledge and experience in maxillary obturators and mandibular prostheses following jaw surgeries. Familiarity with the principles and techniques in providing facial and extra-oral prostheses is required.

# 4. Craniomandibular Disorders

Candidates should demonstrate competency in diagnosis of craniomandibular disorders and non-surgical management including occlusal appliances. An understanding of temporomandibular joint surgery is required.

# 5. Implant Prosthodontics

Candidates should be familiar with the full range of clinical techniques and procedures. A good understanding of the related laboratory techniques and procedures is also required.

# **Appendix III**

## **Exit Examination in Prosthodontics**

The candidate must demonstrate in-depth knowledge, understanding, experience and competency required at a specialist level. Candidates would not be examined by their designated supervisor / trainers as far as possible. The candidate must show up-to-date knowledge and clinical experience in the following components:

- 1. Advanced Fixed Prosthodontics including gerodontology and management of congenital and developmental defects of the dento-facial complex.
- 2. Advanced Removable Prosthodontics including pre-prosthetic surgery and rehabilitation following maxillofacial surgery.
- 3. Oral rehabilitation of medically compromised patients.
- 4. Craniomandibular disorders.
- 5. Dental Implantology.
- Advances in dental materials and dental laboratory technology in the field of Prosthodontics.

#### The Exit Examination includes:

#### 1. Log Book

The purpose of this component is to enable the candidate to demonstrate the varieties of clinical cases treated under supervision. The candidate will be asked to describe, explain and

discuss contents of the Log Book during an oral examination which will normally last for 1 hour.

#### 2. Written Assignment

This component is to assess the candidate's knowledge of clinical Prosthodontics at the specialist level. The candidate is required to present an essay of approximately 2000 words in length, on a clinical topic chosen by the candidate and approved by the Specialty Board in Prosthodontics no less than 6 months before the oral examination.

#### 3. Clinical Examination

This component is to evaluate the adequacy and readiness of the candidate to handle complex clinical problems. The candidate will examine patients/clinical cases provided by the examiners followed by an oral examination of normally 1-hour duration.

#### 4. Log Diaries

There will be an examination of normally 1-hour duration on 10 documented cases treated by the candidate. The cases selected by the candidate should demonstrate the breadth of the diagnostic and clinical skills and the quality of patient care at the specialist level.

The cases presented should spread among the 5 areas, namely Fixed Prosthodontics, Removable Prosthodontics, Maxillofacial Prosthodontics, Implantology and Temporomandibular Disorders.

The original patient records including radiographs and, where appropriate, dental laboratory work should be made available for inspection by the examiners.

The format of the documentation shall be determined by the examiners and approved by the Specialty Board in Prosthodontics.

A signed statement should accompany the Log Diaries from the trainer responsible for the

clinical supervision of the candidate, confirming the candidate's participation in the management of the submitted cases. Any treatment procedures that were carried out by another clinician must be indicated.