



**European Society of Endodontology**

## **ESE/ADEE Position Statement**

### **Assessment of undergraduate dental students**

## **ESE/ADEE Position Statement on the assessment of Undergraduate dental students**

### **Background**

Following its Lisbon Education Symposium (2013), the ESE, in partnership with the Association for Dental Education in Europe (ADEE), established a Special Interest Group to develop recommendations for the assessment and monitoring of undergraduate students in Endodontology.

The overall aim was to promote a consistent and educationally sound approach to the assessment and monitoring of students, with special focus on key points of transition:

1. from preclinic to clinic.
2. from dental school to practice.

This position statement is presented as a list of recommendations, developed through questionnaire-based surveys of all European dental Schools held on the ESE database, followed by extensive face-to-face discussions of Special Interest Group attendees.

The recommendations are intended to promote reflection and development against a defined benchmark.

### **1. Recommendations on student evaluation at the point of transition from preclinic to clinic**

- i. All European Dental Schools should formally assess the knowledge and skills of their students before they allow them to conduct endodontic procedures on patients. Considerations included: patient safety; motivating student learning; promoting student self-confidence when satisfactory to proceed.
- ii. Preclinical assessment should identify students as:
  - a. Ready for supervised practice.
  - b. Requiring further training.though no current method will eliminate all risks.
- iii. Broader issues of relevance to clinical practice, including communication skills, cross-infection control procedures, local anaesthesia should be assessed, but not necessarily as part of the Endodontology course.
- iv. Preclinical *knowledge*-based assessment should ensure that students understand:
  - a. The fundamentals of endodontic disease.
  - b. The fundamentals of endodontic diagnosis.
  - c. The fundamentals of effective endodontic treatment.
  - d. The assessment of endodontic treatment complexity.
  - e. The instruments and materials employed in endodontic treatment.
  - f. The technical procedures involved in non-surgical root canal treatment.
  - g. The clinical signs of iatrogenic error (eg: perforation, ledge, fractured instrument).

- v. Preclinical *skills*-based assessment should ensure that students can safely and effectively:
  - a. Isolate single teeth with rubber dam.
  - b. Prepare access cavities into the pulps of uncomplicated anterior and posterior teeth.
  - c. Negotiate the root canals of uncomplicated anterior and posterior teeth.
  - d. Determine working length.
  - e. Shape the root canals of uncomplicated anterior and posterior teeth.
  - f. Irrigate root canals.
  - g. Fill root canals.
  - h. Temporise and restore root canal treated anterior and posterior teeth.
  - i. Engage in reflective self-criticism of their work.
  
- vi. Skills-based assessment should be conducted in conditions as close to clinical reality as possible.
  
- vii. The assessment of clinical skills by direct observation, with multiple episodes of assessment may be ideal but is resource-intensive & impractical for many schools.
  
- viii. The criterion-based assessment of treatment stages (ie: isolation, access, working length etc) has advantages over the simple evaluation of postoperative radiographs.
  
- ix. Students should be encouraged to provide a reflective narrative to be assessed with their work – what went well, what went not so well, what they have learned.
  
- x. Manufacturers should be encouraged to develop intelligent systems that will facilitate preclinical skills training in endodontics and provide instantaneous feedback on performance.

## **2. Recommendations on student evaluation at the point of transition from dental school to practice**

The ESE/ADEE:

- i. Recognise that resources to deliver the endodontic curriculum vary from school to school and that students may reach the point of graduation with varying levels of knowledge and experience.
  
- ii. Recommend that all schools develop their preclinical and clinical curricula with reference to the ESE Undergraduate Curriculum Guidelines for Endodontology, and work progressively towards the competence of their students in each of the domains listed.
  
- iii. Recommend that all schools inform their staff and students of the ESE Undergraduate Curriculum Guidelines for Endodontology as a means of raising awareness and encouraging student development across its broad range of knowledge and skills-based competencies.

- iv. Recommend that all schools inform their students that they are at risk of being assessed in any of the domains listed within the ESE Undergraduate Curriculum Guidelines before graduation, as a means of driving engagement and learning.
- v. Recommend that all schools formally assess the competence of their students to perform root canal treatment on uncomplicated anterior and posterior teeth before allowing them to graduate. This may take the form of a practical examination, or ideally evidence from the management of a collection of clinical cases, assessed by teachers against standardised criteria.

Exercises of this sort should be conducted in conditions as close to clinical reality as possible, and be 'whole task' assessments, assessing knowledge and clinical performance, and with opportunities for student self-assessment and reflection.