

Direct Observation of Procedural Skills (Surgical DOPS)

Trainer/Trainee Guidance Points

These guidance points are to be used in conjunction with point 6 ('performs the technical aspects in line with the guidance notes') on the main Surgical DOPS form. A mark should not be given for each of these points – they should instead be used to inform the mark to be given for point 6.

Specialty: Orthodontics

Procedure: Superimposition of lateral cephalometric radiographs

Steps to be performed

1. Selects appropriate lateral cephalometric radiographs for superimposition, taken at the appropriate timepoints in the patient's treatment.
2. Ensures that both lateral cephalometric radiographs are at the same magnification.
3. Corroborates the accuracy of lateral cephalometric radiograph tracings selected for superimposition as per DOPS guidance: 'tracing of a cephalometric radiograph'.
4. Explains the purpose of superimposing lateral cephalometric radiographs to the assessor demonstrating understanding of the technique.
5. Identifies appropriate anatomical landmarks and planes for cranial base superimposition (e.g. Bjork's stable structures in the anterior cranial base, the S-N plane, de Coster line), regional maxillary superimposition (e.g. zygomatic key ridge, maxillary plane) and regional mandibular superimposition (e.g. anterior contour of chin, contour of mandibular canal, lower contour of mineralised tooth germ before root development has begun).
6. Accurately superimposes lateral cephalometric radiographs and regional maxillary and mandibular superimpositions in different colours pertaining to start and mid-treatment or near-end treatment lateral cephalometric radiographs as appropriate.
7. Ensures superimpositions are of presentable quality (e.g. all tooth sizes across all lateral cephalometric radiographs are standardised, clear pencil outlines seen, suitably thin tracing point thickness chosen).
8. Able to analyse the superimposition, including an assessment of growth rotations, and understand the reason for any changes noted.
9. Able to discuss relative advantages and disadvantages of superimposition method chosen.
10. Demonstrates an understanding of how the lateral cephalometric radiograph superimpositions may impact on future treatment decisions and mechanics.
11. Ensures clinical records are completed correctly.