

Anterior approximal preparations and restorations

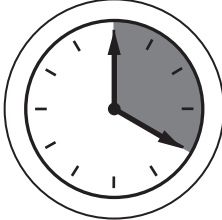


	Types of learning	Resources	UK General Dental Council learning outcome(s)*	Session learning outcome(s)
Session 1			1.14.1	Cut a suitable approximal preparation into a plastic and a natural tooth
	Didactic elements		1.1.3 1.1.5	Describe the typical location and pattern of approximal caries
	Learner-centred	Frasaco Jaw	1.1.2 1.1.4	
	Reflective	Chapters 11,22	1.1.1	
	Critical appraisal	Handout		Derive a planned approach to investigating and managing these lesions
	Peer review			
			1.14.1	Remove simulated caries from plastic teeth
Session 2				Discuss criteria for successful critical appraisal and peer review of approximal preparations
	Didactic elements			Appreciate the range of matrix systems available and how the material properties affects clinical outcome
	Learner-centred			
	Reflective	Chapters 7,16	1.1.10 1.1.9	Appreciate the limitations and problems of adhesive restorations
	Critical appraisal		1.14.4 1.14.5	Restore an anterior approximal cavity with composite
	Peer review		1.14.1 1.14.4	

* - black (dentists), blue (therapists)

Teaching notes for Session 1

KEY POINTS:

- ✓ In principle, the rationale behind the preparation is the same as for posterior approximals
- ✓ Access from the palatal ensures optimal aesthetics, but the preparation must clear the contact point
- ✓ Encourage students to use direct vision where possible, by repositioning themselves and the simulator heads accordingly (see chapter 6)

	<ul style="list-style-type: none"> • Work through sheet • Ask students to then cut Frasaco 11d first <i>without</i> a demonstration • Review their approach and then develop criteria • Critical appraisal and peer review of 11d
	<ul style="list-style-type: none"> • Demonstrate 11d and then remove from the Frasaco jaw to view. It is possible to use a caries-simulated tooth to visualise the location of a typical lesion but they tend to exaggerate the size. Demonstrate with a small round and a pear, let them try.
	<ul style="list-style-type: none"> • Prepare Frasaco 22d and 31d • <u>STOP</u>

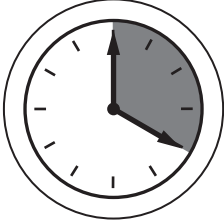


Anterior approximal preparation assessment criteria

- Cavity within middle 1/3 of the crown
- Not needlessly endangering the pulp
- Smooth outline form, no sharp internal angles
- Minimally destructive to palatal tissues
- No damage to the adjacent tooth
- Clear simulated contact point in all directions
- Not grossly perforating the buccal surface
- Tangentially approaching just below the simulated contact point
- Buccal wall wider than palatal entrance to cavity
- No grossly unsupported enamel

Teaching notes for Session 2

KEY POINTS:

- ✓ Ensure that students understand the need for clear matrices and for good adaptation at the base of the approximal box
- ✓ Demonstrate the various methods for recontouring and polishing composites
- ✓ Highlight the potentially destructive nature of finishing burs and discs on existing restorations, natural tooth tissue, and the soft tissues

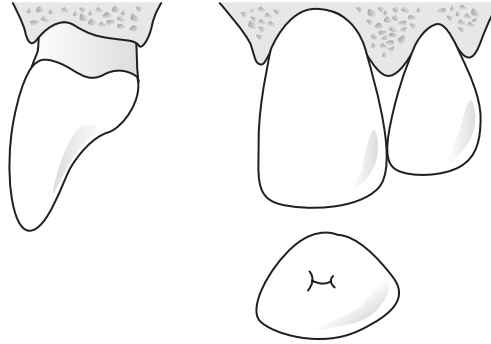
	<ul style="list-style-type: none"> • Revisit critical appraisal and peer review for cavities Frasaco 22d and 31d • Prepare natural 11d, 22d • Peer review and modify
	<ul style="list-style-type: none"> • Identify equipment required to restore with composite • Develop criteria for restoration • Demonstrate restoration of 11d in composite using clear strip matrix and wedges – demonstrate destructive nature of high speed polishing burs
	<ul style="list-style-type: none"> • Students to restore natural 11d and 22d then cut & restore 31d, 41m • Peer review and critically appraise

Anterior approximal restoration assessment criteria

- Not under-filled, no defects, no foreign bodies
- No ledges or overhangs
- (Matching colour)
- Restores morphology and contact point
- Smooth
- Properly cured
- Minimal flash at margins
- No damage to tooth substance due to polishing
- No damage to adjacent tooth
- Tooth not bonded to adjacent.

Handout for Anterior approximal preparations

Where do you expect to find caries between upper anterior teeth? Mark on the diagram where you expect to see caries starting in tooth 21:



What problems are you expecting to encounter when you manage caries that affects the anterior teeth?

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How will you overcome these problems?

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Now draw on the diagrams above, the outline of a preparation you would expect to undertake to access and deal with the caries between anterior teeth

Now prepare a cavity in tooth 11 of your plastic teeth on the distal aspect.

Finally, think of some criteria that you would like to see in an anterior approximal preparation; did your prep fit these? You may remove the tooth to inspect the location of your preparation more closely.

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You will now see a demonstration of an approximal preparation before moving onto your natural teeth.