



Chairside Training Card

Exercise 1 — Basic Motor Skills

What you need:

Surgical microscope with magnification of approximately 2X-20X.
Kilgore #200 typodont with 28 teeth.
Standard hand piece
Crown preparation diamond burs
Microsurgeon's chair as described in Chapter 1 - Ergonomics

Goals

Developing initial microscope motor skills under increasing magnification of 2X-12X.

Key concepts to grasp before you begin

Use the three specific burs shown in Exercise 1.
Use the gross reduction technique specified in Exercise 1.

Procedure — allow 60-minutes

- Position yourself properly according to Ergonomic Chapter 1
- Disassemble the typodont into the upper and lower arches.
- While holding one of the arches in your non-dominant hand and the dental hand piece in the other, perform gross crown preparations on six to ten posterior teeth including numbers 3, 14, 19 and 30.
- Your goal is to complete at least four crown preparations in an hour's time **under the microscope**. Consider four to be the minimum required. If you can prepare six or ten posterior teeth within the hour, so much the better.
- To budget your time effectively, spend the first **20-minutes** doing gross preparation with the large football coarse diamond bur and the large bullet-nosed coarse diamond bur. Then spend the remaining **40-minutes** of your hour using the tapered flat-end fine finish diamond bur refining your gross preparations. Begin at 2X to 4X magnification, and in the last 40-minutes you should increase to at least 10X, choosing the higher magnifications to do finer work.

The process is cut — appraise at higher magnification — correct and refine. Repeat the steps until you are pleased with the result.

- You must hold the arch in your hand as you work. This will greatly help you learn how to operate under increasing magnification.
- The object of this exercise is not the perfect crown prep but developing microscope motor skills under increasing magnification.
- Focus on developing visually driven motor skills instead of tactilely driven motor skills.

*Note: This chairside training card is **not** a replacement for reading the exercise-1 chapter.*