PRINCIPLES OF INTRA CORONAL
CAVITY PREPARATION AND
RADICULAR SPACE PREPARATION
Objectives of cleaning and shaping

1. To remove and/or eliminate from the root canal, all of its contents that may lead to the growth of micro-organisms or breakdown of toxic products into the peri-apicalicular space.

2. To remove the irregularities of canal walls as well as obstructions such as calcifications, filling materials etc.

3. To prepare the root canal not only for its disinfection but also to develop a shape that permits the simplest and most effective 3D fitting.
4. Shaping facilitates obturation

- Shaping facilitates 3-D obturation by removing restrictive dentin
**Number, Position, and Curvature of Root Canals:**

*To prepare each canal efficiently without interference, the cavity walls often have to be extended to allow an unstrained instrument approach to the apical foramen.*
Cleaning and Débridement of the Root Canal

1. The first objective is achieved by skillful instrumentation coupled with liberal irrigation.

2. This double-pronged attack will eliminate most of the bacterial contaminants of the canal as well as the necrotic debris and dentin.
4. Retention form

- Near parallel walls in the apical 2-3 mm ensure a snugly fitting G.P. [Apical TUG BACK]

- Most crucial for preventing apical leakage.