

12.b.

Removal of separated endodontic instruments

1. Problems caused by separated endodontic instruments
2. Frequency of fracture (separation)
3. Factors influencing the removal of separated endodontic instruments
 - a. Tooth-related aspects
 - b. Aspects related to the separated endodontic instruments
 - c. Operator-related aspects
 - d. Patient-related aspects
4. Possible treatment options
 - a. Orthograde
 - i. Bypass
 - ii. Removal
 - iii. Leave instrument where it is
 - b. Surgical (retrograde)
5. Instruments used for removal of separated endodontic instruments
6. Techniques of removal
7. Risk of removing separated endodontic instruments