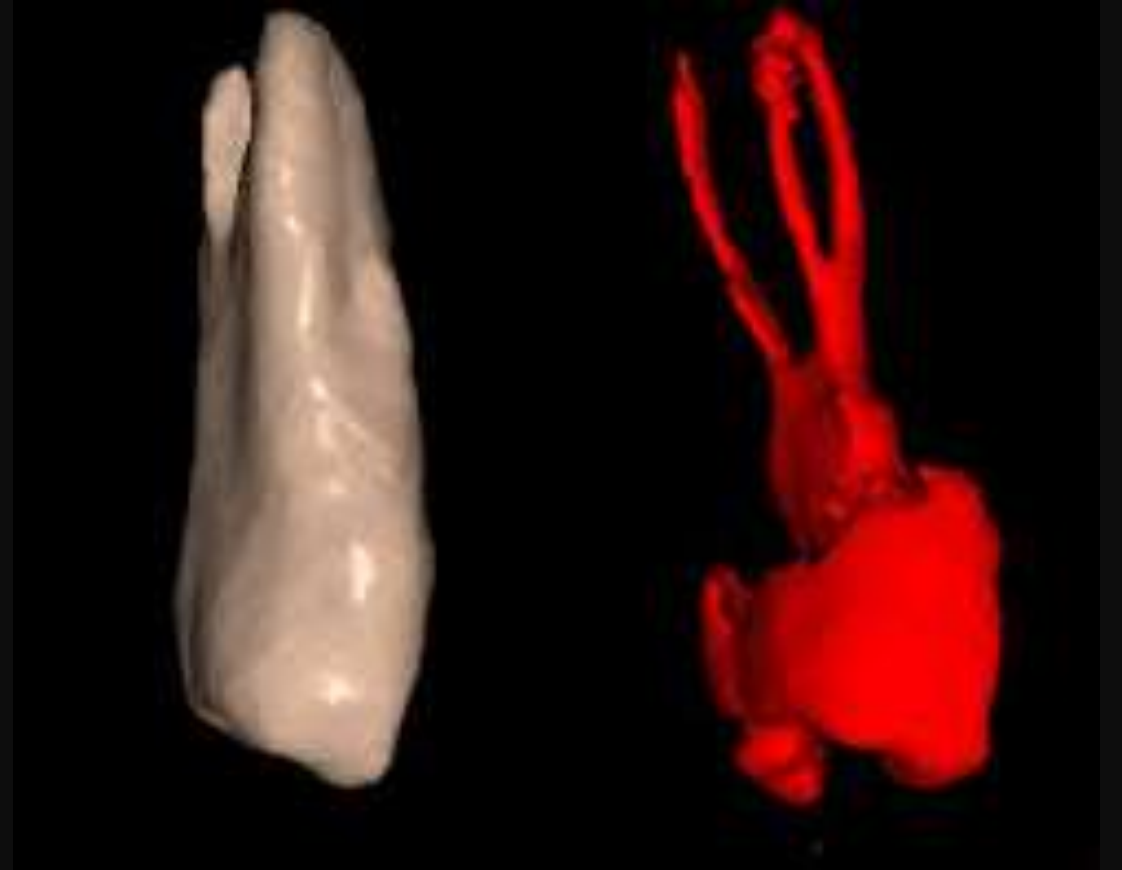


Clinical management of molarized premolars with tree canals



D-r Dejan Ivanovski



Prevalence by Tooth Type

- **Maxillary First Premolar (Upper 4):** This is the most common premolar to have three canals, appearing in roughly **0.5% to 6%** of cases. They typically have one palatal and two buccal (mesiobuccal and distobuccal) canals
- **Maxillary Second Premolar (Upper 5):** It is much rarer here, occurring in only about **0.3% to 1%** of the population.
- **Mandibular Premolars (Lower 4 & 5):** These are the rarest of all, with an incidence of approximately **0.4% to 0.5%**.

Clinical management protocol

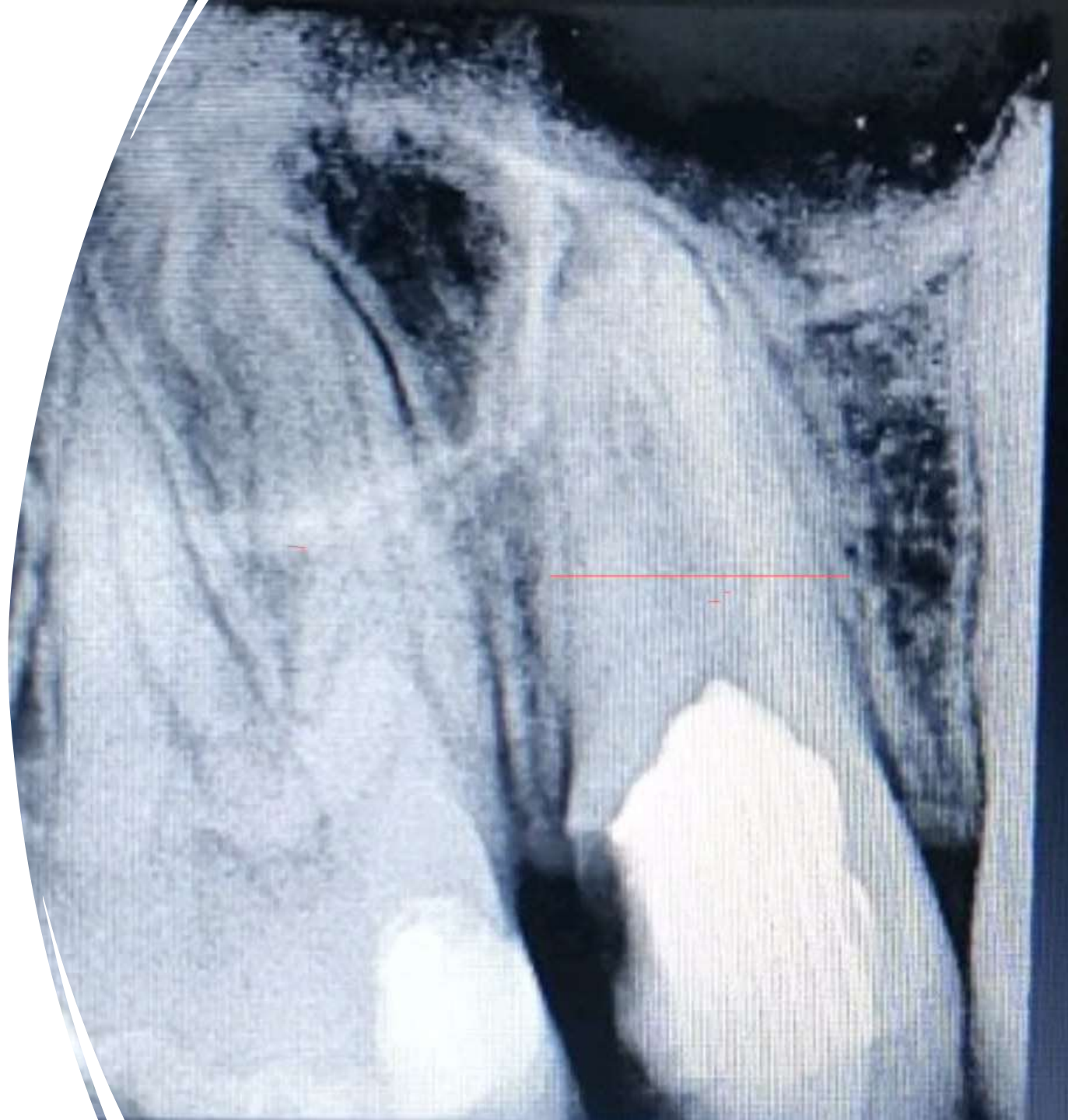
```
graph TD; A[Clinical management protocol] --> B[1. Identification]; B --> C[Angulated X-rays: mesial and distal angulations to see if the periodontal ligament space suggests extra roots]; B --> D[CBCT (Small Field of View): This is the gold standard];
```

1. Identification

Angulated X-rays: mesial and distal angulations to see if the periodontal ligament space suggests extra roots

CBCT (Small Field of View):
This is the gold standard

-
- In premolars if the mesio-distal width of the mid-root is equal to or greater than the mesio-distal width of the crown, three root canals will be most likely present.





2. Access Cavity Modification: A standard oval access is typically insufficient. A **T-shaped or triangular outline** is often required to locate the mesio-buccal, disto-buccal, and palatal/lingual orifices

-Using ultrasound tips .

- **Magnification & Visualization:** The use of a [dental operating microscope](#) or high-power loupes is essential for locating deep splits or small, independent orifices. -

Oval acces cavity



Triangular acces cavity



Thank you for your
attention!
