

ENDODONTIC TREATMENT IN GERIATRIC PATIENTS EXPECTATIONS, CHALLENGES, OBSTACLES, RESULTS

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🦷 **Introduction:** With increasing life expectancy, preserving natural dentition in older adults has become a priority. Endodontic treatment in geriatric patients presents unique challenges due to age-related dental and systemic health changes.

🔴 **Objectives:**

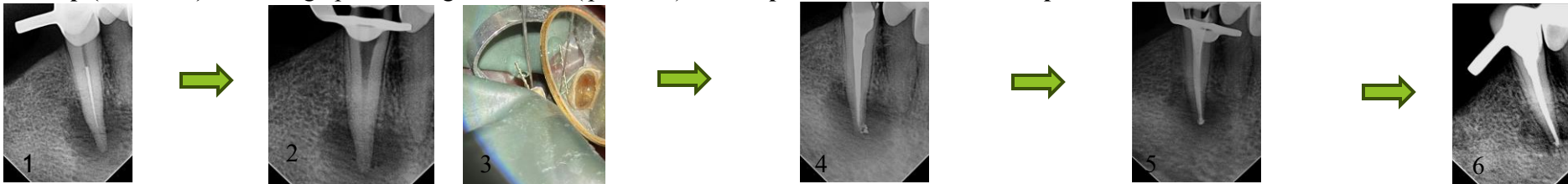
- Highlight clinical challenges and considerations in geriatric endodontics.
- Emphasize diagnosis, treatment planning, and execution strategies.
- Address complex root canal anatomy, systemic conditions, and physiological changes.

✅ **CASE 1: BROKEN FILE REMOVAL IN A MEDICALLY COMPROMISED 71-YEAR-OLD MALE PATIENT**

A 71-year-old male patient with a medical history of diabetes, hypertension, and anticoagulant therapy presented with exacerbated chronic periodontitis. Radiographic examination revealed a broken file in the lower right canine (#43) (picture 1)

Treatment Approach: ✅ **Microscope-assisted ultrasonic retrieval** (picture 2, 3) ✅ **Ultrasonically activated NaOCl irrigation + CaOH-iodoform dressing** (picture 4) ✅ **Single-cone obturation with bioceramic sealer** (picture 5)

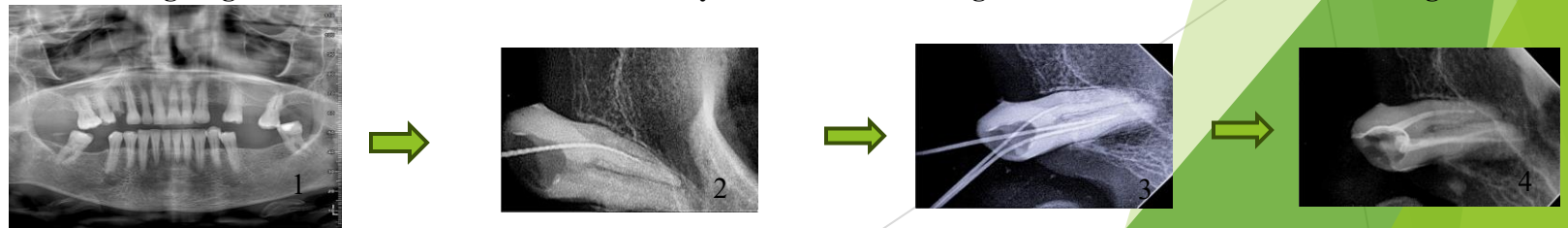
Follow-Up (3 Months): ✅ **Radiographic healing confirmed.** (picture 6) ✅ **New prosthetic restoration completed.**



✅ **CASE 2: ENDODONTIC TREATMENT OF SEVERELY CALCIFIED MAXILLARY SECOND MOLAR IN A 70-YEAR-OLD FEMALE PATIENT.**

A 70-year-old female required endodontic treatment of #27 for prosthetic rehabilitation. Panoramic X-ray revealed severe canal calcification (picture1), complicating access and instrumentation. Patient's latex sensitivity required adjustments in isolation techniques to ensure a safe and effective treatment.

Treatment Approach: ✅ **Magnification with loupes & ultrasonics** for precise canal entry. ✅ **Hard glide path negotiation in multiple canals**, utilizing loupes-assisted visualization, gradual mechanical negotiation, and EDTA chelating agents (picture2). ✅ **Establishment of working length** using radiographic assessment and electronic apex locator verification (working length still not reached picture 3). ✅ **Hand & rotary instrumentation** to establish a working length in all affected canals. ✅ **Ultrasonically activated NaOCl irrigation** for enhanced disinfection. ✅ **Single-cone obturation with bioceramic sealer** (picture4).



Conclusion:

Endodontic success in geriatric patients requires **advanced techniques, adaptation to systemic conditions, and a patient-centered approach.** Using **magnification, ultrasonics, chelating agents, and bioceramic sealers**, predictable treatment outcomes can be achieved in complex cases, allowing for **functional restoration and long-term retention of natural dentition.**