



REVIEWER'S REPORT

Manuscript No.: IJAR-56298

Title: Treatment of a Mandibular Premolar with Uncommon Mesial and Distal Canal 4 Configuration with Triple Antibiotic Paste

Recommendation:

Accept as it is

Accept after minor revision.....Yes.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality	•			
Techn. Quality	•			
Clarity		•		
Significance		•		

Reviewer Name: Dr. Sireesha Kuruganti

Detailed Reviewer's Report

This manuscript presents a clinically relevant nonsurgical endodontic retreatment case involving a mandibular first premolar with an uncommon canal configuration and a missed canal, managed using triple antibiotic paste (TAP). The topic is important, as mandibular premolars are well known for their anatomical variability and higher failure rates due to missed canals. The case is generally well documented, logically structured, and supported by relevant literature. However, several scientific, methodological, and editorial issues should be addressed to enhance clarity, rigor, and suitability for publication.

##Major Comments

1. Title and Scope

- The title (Lines 3–4) clearly reflects the content and highlights both the anatomical variation and the use of TAP.
- However, the phrase “Mesial and Distal Canal Configuration” may be misleading, as the canals are later described as buccal and lingual (Lines 81–82).

Recommendation:

Revise the title to accurately reflect canal orientation (e.g., buccal and lingual canals) for anatomical precision.

2. Abstract

- The abstract (Lines 6–18) is concise and covers background, case description, intervention, and outcome.
- The clinical problem (missed canal and periapical lesion) and the rationale for using TAP are clearly stated (Lines 8–13).

REVIEWER'S REPORT

- However, numerical clinical details (e.g., patient age, follow-up duration) are absent.

Recommendation:

Include key quantitative details such as patient age and follow-up period to improve completeness and reproducibility.

3. Key Message and Keywords

- Keywords (Lines 19–20) are appropriate and relevant.

- The Key Message (Lines 20–23) effectively emphasizes the importance of anatomical identification and TAP in retreatment.

Minor suggestion:

Consider adding “Mandibular first premolar” as a keyword to improve indexing and discoverability.

4. Introduction

- The introduction (Lines 28–53) provides a strong literature-based rationale, highlighting:

- The role of missed anatomy in endodontic failure (Lines 28–30).

- The complexity of mandibular premolar anatomy (Lines 30–35).

- The antimicrobial rationale for TAP (Lines 41–45).

- The authors appropriately identify a gap in literature regarding retreatment cases using TAP in mandibular premolars (Lines 46–47).

Strength:

The introduction is well referenced and logically builds the case for reporting this clinical scenario.

Recommendation:

The introduction could be strengthened by briefly stating the clinical objective or learning point of the case at the end of the section.

5. Case Report

- Patient history and symptoms are clearly described (Lines 62–67).

- Clinical and radiographic findings are appropriate and lead logically to the diagnosis (Lines 68–72).

- The diagnosis of symptomatic apical periodontitis is correctly stated (Line 71).

Minor issue:

The tooth number is implied later (wrt 34 in figures) but not explicitly stated in the text.

Recommendation:

Explicitly mention the FDI tooth number in the case description for clarity.

6. Endodontic Procedure

REVIEWER'S REPORT

- The retreatment protocol (Lines 74–91) is detailed and follows accepted clinical standards:
 - Rubber dam isolation (Line 75)
 - Removal of gutta-percha (Lines 76–79)
 - Working length determination (Lines 80–82)
 - Use of NaOCl and EDTA irrigation (Lines 83–85)
 - Placement of TAP as intracanal medicament (Lines 85–87)
- The use of TAP is clinically justified.

Concern:

The duration of TAP placement is not clearly specified.

Recommendation:

Mention the exact time period for which TAP was left inside the canal, as this has clinical and biological significance.

7. Discussion

- The discussion (Lines 93–119) effectively correlates the present case with existing literature.
- The authors appropriately cite:
 - The prevalence of missed canals in retreatment cases (Lines 96–99).
 - Failure rates of mandibular premolars (Lines 102–104).
 - The polymicrobial nature of endodontic infections and rationale for TAP (Lines 107–113).
- The discussion clearly links the cause of failure (missed canal) with the successful outcome after retreatment (Lines 114–117).

Strength:

Good integration of epidemiological data and microbiological rationale.

Minor limitation:

Potential disadvantages of TAP (e.g., tooth discoloration, antibiotic resistance) are not discussed.

Recommendation:

Briefly acknowledge limitations or risks associated with TAP to present a balanced discussion.

8. Conclusion

- The conclusion (Lines 121–128) is clear, concise, and well aligned with the case findings.
- It reinforces the importance of:
 - Anatomical knowledge
 - Diagnostic vigilance
 - Use of adjunctive medicaments like TAP

No major issues identified.

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

- Minor grammatical inconsistencies are present (e.g., spacing, punctuation around references).
- Ensure uniform formatting of headings (e.g., "Case Report," "Discussion," "Conclusion").

##Figures and Radiographs

- Figures are sequentially numbered and clinically relevant (Lines 162–196).
- Pre-operative, working length, obturation, and follow-up radiographs support the narrative.

Suggestion:

Add brief descriptive captions explaining the clinical relevance of each figure, not just the procedural step.

##Final Recommendation

Accept with Minor Revisions

The manuscript presents a valuable and clinically relevant case. Addressing the above minor scientific clarifications, anatomical accuracy, and editorial refinements will significantly improve its quality and suitability for publication.