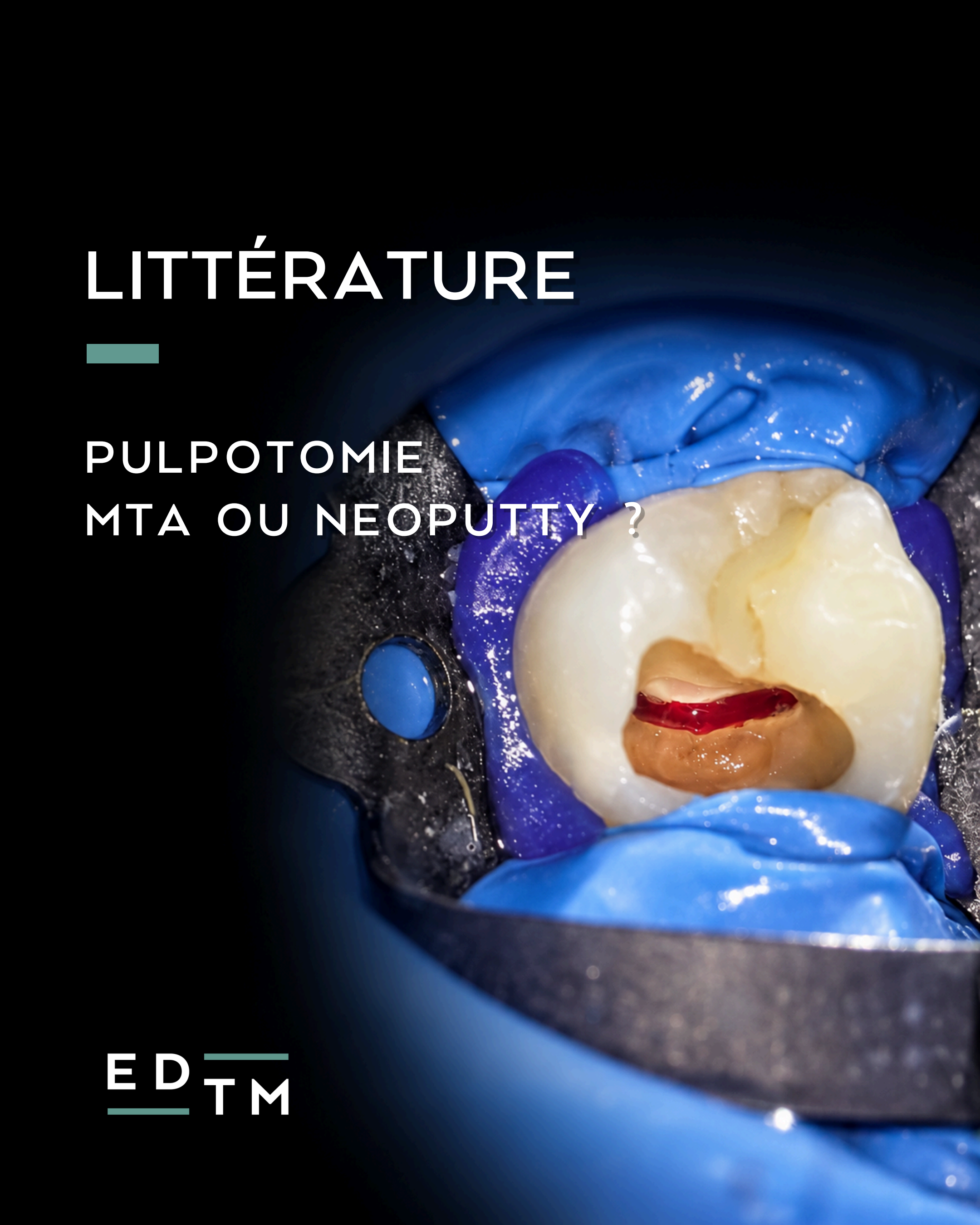
LITTÉRATURE

PULPOTOMIE
MTA OU NEOPUTTY ?



EDTM

Pulpotomie sur dents matures : MTA ou NeoPutty ?

Que nous apprend un nouvel essai clinique randomisé à 2 ans ?



✓ Essai clinique randomisé contrôlé
✓ 139 molaires mandibulaires matures avec pulpotomie partielle
✓ Randomisation : MTA vs NeoPutty
✓ Évaluation clinique et radiographique à 24 mois

International Endodontic Journal

ORIGINAL ARTICLE

Two-Year Outcome of Partial Pulpotomy Using Mineral Trioxide Aggregate or a Premixed Calcium Silicate Cement: A Randomized Clinical Trial

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Keywords: calcium silicate-based cements | endodontics | partial pulpotomy | pulpitis | vital pulp treatment

ABSTRACT

Aim: To compare the clinical and radiographic outcomes of partial pulpotomy performed with mineral trioxide aggregate (White MTA Angelus) or a premixed calcium silicate-based putty cement (NeoPutty) in mature mandibular molars with deep carious lesions and to explore factors associated with treatment outcome.

Methodology: In this randomized clinical trial, 139 mature permanent mandibular molars in adult patients (median age 36 years), presenting with deep carious lesions located within 0–1.5 mm from the pulp on radiographic examination and diagnosed with initial, mild, moderate or severe pulpitis according to the Wolters classification, underwent partial pulpotomy using White MTA Angelus ($n = 64$) or NeoPutty ($n = 75$). Clinical and radiographic outcomes were assessed after 24 months using predefined success criteria. Multivariable analyses were performed to explore factors associated with treatment outcome.

Results: All 139 treated teeth completed the 24-month follow-up (100% recall rate). Clinical and radiographic success rates were 90.6% for White MTA Angelus and 92.0% for NeoPutty, with no statistically significant difference between groups ($p = 0.774$). The overall success rate was 91.4%. Haemostasis time was significantly associated with treatment outcome (odds ratio = 0.623; 95% confidence interval: 0.429–0.905; $p = 0.013$), whereas preoperative pulpal diagnosis according to the Wolters classification was not significantly associated with treatment outcome.

Conclusions: Partial pulpotomy achieved high 24-month clinical and radiographic success with both White MTA Angelus and NeoPutty. Within the limitations of this study, haemostasis time, but not preoperative pulpal diagnosis according to the Wolters classification, was significantly associated with treatment outcome.

Trial Registration: This study was registered at ClinicalTrials.gov (NCT06881615)

[Correction added on 01 October 2026, after first online publication: The copyright line was changed.]

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RÉSULTATS

Des résultats comparables à 2 ans





90,6 %

MTA

92 %

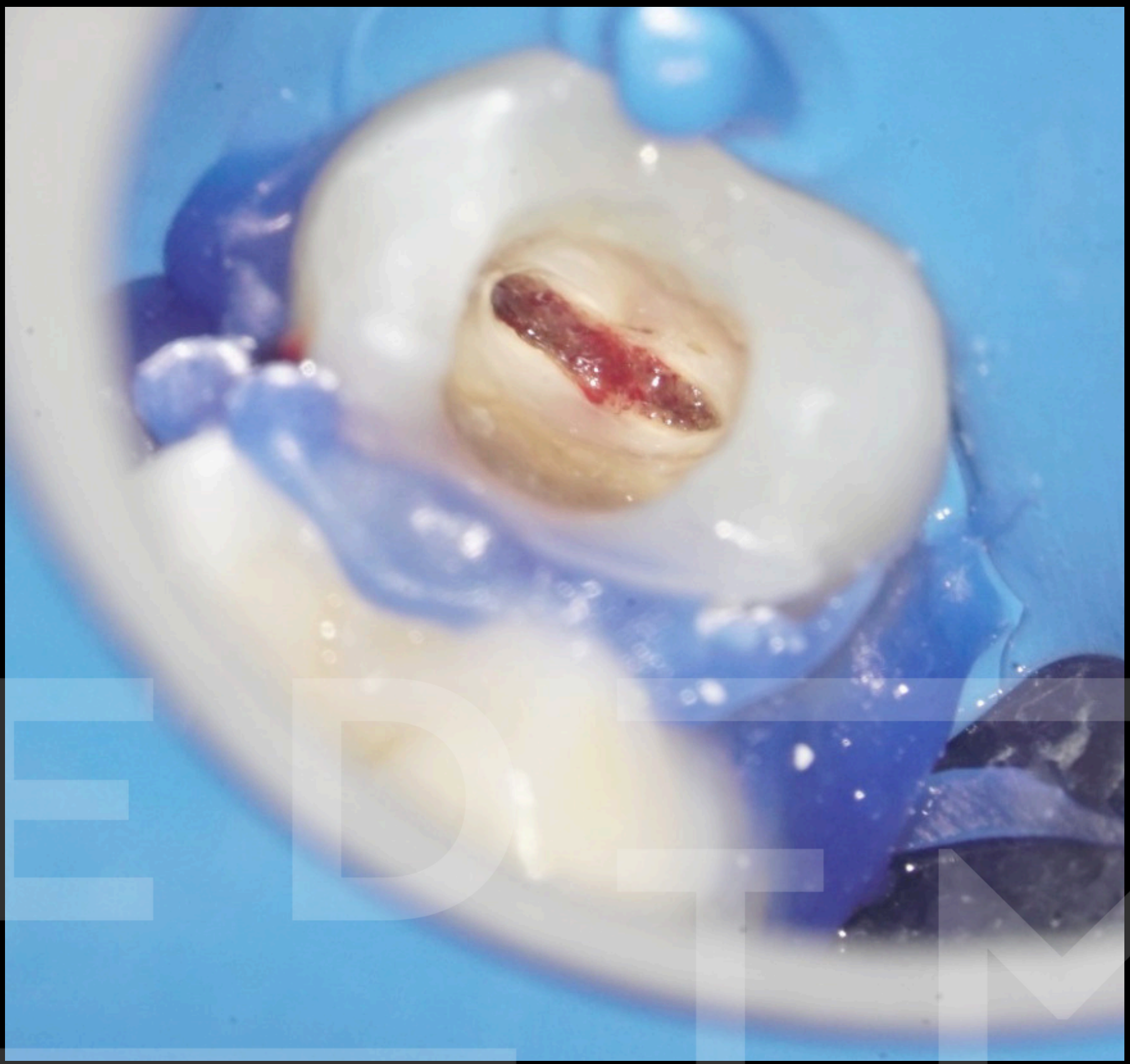
NeoPutty

Aucune différence statistiquement significative

À RETENIR

« Au-delà du choix du biomatériau, l'hémostase est le facteur essentiel dans la prise de décision »

Serrano et al. 2026



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