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Introduction

e many advances in conservative dentistry and oral hygiene mean that patients keep their natural teeth longer. It is therefore an aging organ, cracked or not, alive or not, blocked or with loss of substance or signi cant or crowned decay that will be subjected to chewing with a possibility of fracturing.

e pain can become debilitating when the pulp and other internal or external structures of the tooth are a ected and this is the reason for consultation.

is work aims to study coronary radicular dental fractures in the usual population of dental o ces in Côte d'Ivoire from an epidemiological, etiopathogenic, clinical, pathological and therapeutic perspective.

Materials and Methods

e study population consists of 100 clinical cases of coronary radicular fractures.

e tooth concerned, living or not, with or without root canal treatment, bearing a lling or not, the type of fracture, the mobility of the palatal, vestibular or lingual fractured side and the presence of adjacent or antagonistic teeth are noted.

Retro-alveolar radiology is performed for each clinical case.

Emergency and de nitive treatment are speci ed for each case and depending on the type of fracture.

Results

Epidemiologically, we noted a 9% frequency of coronary radicular fractures diagnosed during our consultations [1]. Chewing was the main circumstance of occurrence and in 70% of cases, the diet was not hard (chewing rice, foutou, attiéké) the small metal or stone accidentally bitten or the trauma is only found in less than 30% of cases. e patient in 90% of cases heard a cracking noise, and gum pain caused by the mobility of the fractured end 80% or pulp exposure 10% motivated the consultation.

e tooth presented with an empty occlusal cavity 40%, an over owing temporary or permanent dressing 50%, or decay 5%.

e teeth were pulped in 85% of the cases and the opposing tooth existed in all the cases and o en alive. Adjacent teeth were present in 70% of cases and cases of teeth %

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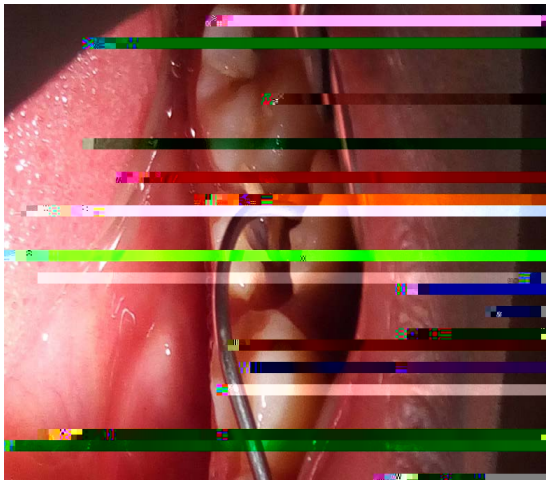
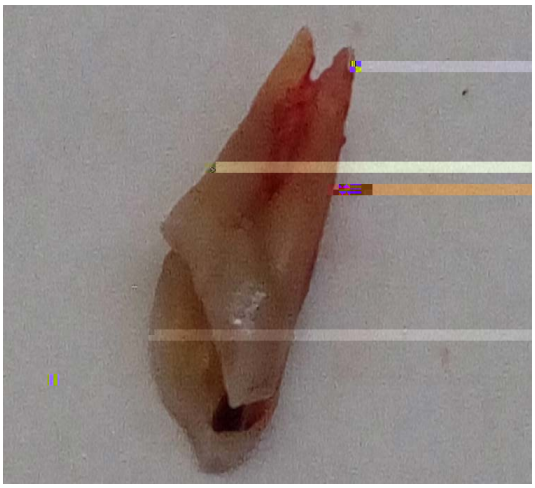


Vertical fracture on a second mandibular PM already devitalized (the probe objectifying the fracture).



Reconstructed tooth (large cavity occlusal after the fall of the amalgam).

Finally we note the almost permanent presence of an adjacent tooth which plays the role of vector agent of the fracture during chewing but the hardness of the food is not incriminated in this study because the patients all report that the fracture occurred when chewing so foods. It is therefore more the fragility of the tooth that favors the occurrence of the fracture, contrary to certain data in the literature [4].

Coronoradicular fractures are the result of high mechanical stresses and subsequent shear forces determining the direction of the fracture line, so separation then divides the tooth into a coronal (peripheral) fragment and an apical (proximal) fragment [7].

e molars are the most a ected by caries disease and root canal treatments having resolved the issue of pain, most patients no longer continue care and the prosthetic restoration is not performed. Also, when the fracture occurs and the line is subgingival, the preservation of the tooth is di cult, which is why some of our colleagues in Africa do not hesitate to extract the fractured tooth. However, the discussion of treatment modalities should take into account the patient's age, the means of the patient and the fracture line. New therapeutic indications for fractures have been adopted according to AAE [2] and range from simple monitoring to tooth extraction. Removal of the fractured dental fragment and restoration with glued materials, periodontal surgery or root amputation can be performed as appropriate. In the case of combined lesions without dislocation of the coronary fragment, endodontic treatment must be instituted without delay, and in the event of dislocation of dental fragments, the clinical solutions currently proposed are conventionally divided into two categories:

- e cast corono-radicular reconstruction (Figure 3).

- Coronal-radicular reconstruction, with ber anchoring [8] But it is usually not possible to keep teeth that have undergone vertical fracture or a very oblique fracture line (diagonal fracture), then the tooth must therefore be extracted (Figure 4).

Conclusion

Coronal radicular fractures are quite worrying for the practitioner by their frequency and their di erent types. e most a ected teeth were, in order of frequency, the upper molars 35%, the upper premolars 30% and the mandibular molars 25%, the other 10% concerning the single-rooted. is is usually teeth already treated or at the end of treatment with a conservative restoration and the possibility of considering a prosthetic restoration or a prosthetic project. ese corono-radicular fractures then occurring from usual chewing raise the question of whether or not the tooth is preserved. is will depend on the type of fracture and the height of the fracture, especially at the root level. e therapeutic possibilities range from simple restoration to the creation of an endoprosthetic complex or to tooth extraction.

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