



Cemental Tears: Case Report

Keun-Hyung Bae*, Seok-Woo Chang, Hyun-Mi Yoo, Dong-Sung Park, Tae-Seok Oh

Dept. of Conservative Dentistry, Samsung Medical Center, Sungkyunkwan Univ. School of Medicine, Seoul, Korea

I. Introduction

Cemental tears have been explained as the detachment of a fragment of cementum from the root surface. Teeth with cemental tears often are presented with severe localized periodontal attachment loss, including pocket formation and alveolar bone destruction. The etiologic factors that lead to tearing of cementum are not known. But, the most frequently suggested causes are occlusal trauma and aging.

This report is presented to help the practitioners recognize the signs and symptoms of these cemental injuries in order to aid in differential diagnosis and treatment planning.

II. Case Presentation

< Case 1 >

1. Sex/age: M/60
2. Chief Complaint(C.C): Discoloration & gingival swelling on #22
3. Past Dental History(PDH): N/S
4. Present Illness(P.I): #22 tooth discoloration, swelling(+), pal(+), per(+), periapical radiolucency
5. Impression: Chronic apical abscess
6. Tx.plan: Root canal treatment & non-vital bleaching

< Case 2 >

1. Sex/age: M/54
2. Chief Complaint(C.C): Gingival swelling
3. Past Dental History(PDH): N/S
4. Present Illness(P.I): #11 Mob(+), Extrusion, EPT(-), Sinus tract(+), Mesial deep pocket Mesial radiopaque fragment
5. Impression: R/O cemental tears
6. Tx.plan: Root canal treatment & Periodontal treatment

< Case 3 >

1. Sex/age: F/51
2. Chief Complaint(C.C): Pain, pus discharge on #11
3. Past Dental History(PDH): 10YA, #11,12 RCT&PFG
4. Present Illness(P.I): #11 Per(+), Pal(+) #12 Per(\pm), M(-)/ Both swelling(-)
5. Impression: #11 Chronic apical periodontitis
6. Tx.plan: #11 Re-RCT.

< Case 4 >

1. Sex/age: M/57
2. Chief Complaint(C.C): Gingival swelling, pus discharge on #41
3. Past Dental History(PDH): N/S
4. Present Illness(P.I): #11 Pus discharge, PD>8mm, Per(-), Mob(+), Ice(+), EPT(+) Cementum like fragement detection
5. Impression: R/O Cemental tears
6. Tx.plan: Subgingival curettage

III. Conclusion

Cemental tears are unique, localized, tooth-related factors associated with attachment loss. The diagnosis of cemental tears can be performed by radiographic evaluation, surgical exploration, and inspection of extracted teeth. An accurate diagnosis is essential for effective treatment of the localized deep defect. Differential diagnosis includes root fracture, periapical infection, periodontal abscess, loss of attachment due to cemental tears.

The treatment of periodontal defects associated with cemental tears vary greatly, from non-surgical therapy to combined regenerative procedures, and includes extraction in cases with hopeless prognosis. But it should be emphasized that a common feature of these treatment methods is the removal of the detached cementum fragments.