Root canal treatment of maxillary 2nd molar

Nu-Ri Kim*, Seok-Ryun Lee, Su-jung Park

School of Dentistry, Wonkwang University, Iksan, Korea

I. Introduction

The treatment of deep carious lesions approaching a healthy pulp presents a significant challenge to the

practitioner. The traditional management of carious lesions dictates the removal of all infected and affected dentin

to prevent further cariogenic activity and provide a well-mineralized base of dentin for restoration. And depending

on pulp exposure, practitioner decides to do either pulp capping or complete root canal treatment(pulpectomy). A

correctly executed, complete root canal treatment shows stable results and non-infectious conditions in

longitudinal studies. The primary goals of root canal treatment are to debride and disinfect the root canal space

and to seal the canals, aiming to establish healthy periapical tissues. In this case, maxillary second molar with 3

root canals was treated by lateral compaction technique.

II. Case report

1. Sex/age: Male/19

2. Chief Complaint: I have pain on the right upper tooth when I bite something.

3. Present illness

- The pain by biting started 2 weeks ago and it got worse

4. Physical examination

- #17 : mesial caries, air(-) ice(-) percussion(+), bite(-), EPT(wnl)

5. Diagnosis

- Proximal caries, Normal pulp, Normal apex on #17

6. Treatment plan:

-Gold inlay or Root canal treatment on #17

III. Conclusion

After caries removal, the pulp was exposed. And the pulp exposure was more than 5mm and the bleeding was

not controlled in 10 minutes. Therefore, the teeth was treated by root canal treatment and filled by lateral

compaction technique. At 1 week recall check, discomfort to percussion was disappeared and no lesion around

root apex. By removing all infected dentin and root canal treatment, the teeth can continue to function like normal

teeth. But it is necessary to protect the teeth by dental crowns to maintain crown sealing and the root canals to be

non-infected condition.

Presenter: Nu-Ri Kim

School of Dentistry, Wonkwang University

460, Iksan-daero, Iksan-si, Jeollabuk-do, Republic of Korea kebi0453@hanmail.net