

Diagnosis and Management of Root Resorption in the Adult Dentition

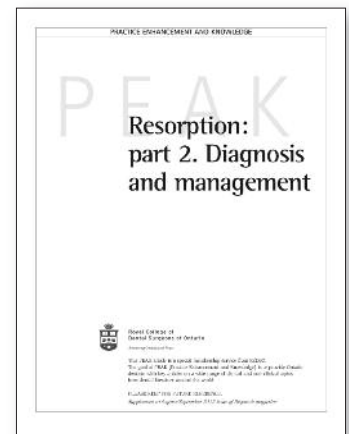
PEAK (Practice Enhancement and Knowledge) is a College service for members. The goal is to regularly provide Ontario dentists with copies of key articles on a wide range of clinical and non-clinical topics from the dental literature around the world.

It is important to note that PEAK articles may contain opinions, views or statements that are not necessarily endorsed by the College. However, PEAK is committed to providing quality material to enhance the knowledge and skills of member dentists.

In the primary/mixed dentition, root resorption is a normal physiological process, resulting in exfoliation of deciduous teeth.

In the adult dentition, however, root resorption is largely pathological and known to be initiated by several factors, including pulpal necrosis, trauma, periodontal treatment, orthodontic treatment and tooth whitening agents. The loss of dental hard tissue results from the activity of osteoclasts and may occur both externally and internally. While the resorptive process may be self-limiting and surface in nature, it also may be progressive, potentially destructive and challenging to manage.

While the clinical appearance of external and internal root resorption may be similar, the pathological processes are somewhat different, requiring different



treatment protocols. Therefore, accurate and early diagnosis of root resorption is essential for successful management.

To provide a comprehensive look at this issue, PEAK is pleased to offer members the following article with the current issue of Dispatch: “Resorption: part 2. Diagnosis and Treatment”, which appeared in the May 25, 2013 issue of the British Dental Journal.

The article begins with the diagnosis of root resorption, which should be based on a thorough history and clinical examination of the patient’s condition, augmented by appropriate radiographs and, possibly, computerized tomography. The article then

Classification of Root Resorption

- External surface resorption
- External inflammatory resorption
- Sterile inflammatory resorption
- Infective inflammatory resorption
- External cervical resorption
- External replacement resorption
- Internal inflammatory resorption
- Internal replacement resorption

presents a classification system, based on the site and type of resorptive process.

The article continues by emphasizing that the fundamental principle in managing root resorption is to halt the activity of osteoclasts. This is followed by a detailed discussion of the management of each type of resorptive process. In addition, two algorithms are presented for the management of external and internal resorption.

For further reading on this subject, members may wish to refer to the preceding article in the series:

“Resorption: part 1. Pathology, classification and aetiology”, which appeared in the May 11, 2013 issue of the British Dental Journal.

**THE LOSS OF DENTAL
HARD TISSUE
RESULTS FROM THE
ACTIVITY OF
OSTEOCLASTS AND
MAY OCCUR BOTH
EXTERNALLY AND
INTERNALLY.**

COLLEGE CONTACT

Dr. Michael Gardner – Manager, Quality Assurance
416-934-5611 1-800-565-4591
mgardner@redso.org