

## **Pathological resorption of the tooth**

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### **Introduction**

Tooth resorption can be characterized as a disease destroying the dental hard tissue. It is well known that most dentists recognize the diagnosis “internal resorption” or “external resorption”. Pathological root resorption is rare, its etiology and pathogenesis are only partially understood. It was therefore interesting to study literature reviews on the pathological resorption of the tooth root.

### **Aim**

To investigate the available literature data on the current state of the problem of pathological resorption of the tooth root.

### **Materials and methods**

In the study all available sources of literature have been analyzed. Such issues were examined as a physiological resorption of the tooth root, cells resorbing hard tissues and regulation of osteoclast and odontoclast activity, etiology and pathogenesis of inflammatory resorption of the tooth, histological features of resorption, clinical and radiological features, diagnosis and differential diagnosis of inflammatory resorption and treatment of inflammatory resorption of the tooth root.

### **Results**

Resorption is a condition associated with a pathologic process resulting in a loss of dental hard tissue by odontoclasts. The etiology for resorption initiates from various injuries to the tooth, including thermal, mechanical, and chemical. There are two main different kinds of resorption, external and internal. External root resorption is a type of pathology initiated in the periodontium and affecting the external surfaces of a tooth which is caused by an injury to the external root surface with an inflammatory component. Internal root resorption is caused by transformation of normal pulp tissue into granulomatous tissues with giant cells, which resorb dentin. Root resorption is typically detected clinically via routine radiographs. Internal resorption is most commonly discovered in the cervical region of the tooth as round well defined radiolucency lesion. It can be associated by any symptoms of pulpitis, trauma and deep caries lesion. It is often very difficult to distinguish external from internal root resorption, so misdiagnosis and incorrect treatment can result. The correct treatment for internal resorption is root canal therapy (which is not effective in external resorption), and chemical debonding using a combination of sodium hypochlorite, calcium hydroxide and MTA.

### **Conclusion**

Resorption is an uncommon pathology of the hard tooth tissues, which destroys the tooth structure. The diagnosis of resorption is in many cases simple, but may in some situations require use of advanced diagnostic techniques. The prognosis of the treatment of tooth resorption is good unless the tooth has been weakened too much by the resorption.