

INFORMATION ON ENDODONTIC PERIRADICULAR SURGERY

Department of Dentistry, National Cheng Kung University Hospital

1. The purpose of periradicular surgery is to treat odontogenic radicular cyst. A radicular cyst is developed typically through the following clinical course: bacteria and the toxins produced by the bacteria stimulate the apical tissue of the tooth and cause inflammation. As the stimulants continue to exist, the simple inflammation gradually leads to the formation of a fluid-containing cyst lined by epithelium. A cyst, once formed, can only be surgically removed. If the cyst is left unattended, it might grow and its treatment will become more difficult.
2. Periradicular surgery involves the following steps: make a gingival flap to expose the cyst at the apex of the tooth and enucleate the cyst tissue, which is sent for pathological exam; perform apicoectomy (excision of root tip) to remove accessory root canals that harbor bacteria, and in view of the root canal filling, back fill the root tip to prevent the bacteria and toxins produced by the bacteria from reaching the apex and stimulating the apical tissues; finally to accelerate healing, fill the area previously occupied by the cyst with bone powder to help the healing of bone in the apical area.
3. Other information: Periradicular surgery is a fairly safe minor surgery. If you have any systemic disease, such as hypertension, diabetes or hepatitis, or history of drug allergy, make sure to inform your dentist. The whole procedure takes approximately 1.5 to 2 hours.