Root Amputation

A root amputation is the surgical removal of one root of a multi-rooted tooth.



What is a root amputation?

A root amputation, or resection, is a surgical technique used to maintain the healthy portion of a molar that has a diseased or damaged root (upper molars have three roots, and lower molars have two roots). This procedure helps to eliminate infection and/or prevent further loss of bone in an area where infection or tooth fracture has caused its loss. If a single root is infected, the surrounding gum tissue may also become infected, leading to the formation of pockets where bacteria and plaque can gather.

A root amputation is also performed for teeth where its roots are so close together that plaque removal and root planing cannot be managed. A root amputation can be used to make room between molars to allow for manageable, non-surgical periodontal treatment to be performed.

How is a root amputation performed?

During root amputation, your oral surgeon will cut into the gums and remove the damaged root, while leaving the remaining healthy roots and crown. A restoration, such as a filling, onlay, or crown, may also be placed to improve the structure and stability of the tooth.

A tooth that is a good candidate for root amputation is one where one root of a multi-rooted and root canal treated tooth has imbedded bacteria in the root, severe bone loss in a concentrated area due to infection or fracture, or decay in a concentrated area but the rest of the roots have sufficient bone to support the tooth. As long as the problem is only effecting the one root, and the remaining tooth structure is healthy and stable, a root amputation can be performed to save the tooth.

What is the risk of not having the surgery done?

If left untreated, the infection or decay can spread to the surrounding area resulting in bone loss which may jeopardize the stability not only of the tooth being affected, but the surrounding teeth as well. Eventually the whole tooth will be compromised and would need to be extracted. Removing one root can help save the tooth and prevent you from having the entire tooth removed.

