

## **Treatment Approaches of the Acute Apical Abscess**

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### **Abstract:**

Acute apical abscess (AAA) is a pulpal lesion that destructs periradicular tissues and causes a significant inflammatory reaction from a necrotic pulp. The lesion may be diffuse or localized liquefaction. AAA is identified by a sudden onset and intense pain. AAA patients typically experience mild to serious pain and/or swelling. Usually swelling would not be present if the abscess is restricted to the bone.

Systemic symptoms including leukocytosis, malaise, and high temperature can occur in patients. Thermal or electrical stimulation produces no response as the pulp in these patients is not vital. While, palpation and percussion of the teeth are regularly painful.

Radiographic characteristics of AAA vary from a clear radiolucent lesion to no changes to widening of the PDL space based on the degree of hard tissue destruction.

Elimination of the etiological factors, usual root canal therapy, and release of pressure (drainage where possible) results in the treatment of the vast majority of cases of AAA. The main indications for periapical surgery are procedural accidents, anatomic complexity of the root canal system, symptomatic cases, and horizontal apical fracture, in addition to corrective surgery and biopsy.

Patients with abscesses must have their temperature measured, and they must be checked for malaise, lymphadenopathy, and fascial space infection. These patients should receive immediate elimination of etiological factors, including drainage of the swelling. Those with a fascial space infection (cellulitis) should be monitored carefully and be treated with adjunctive antibiotics.

Routinely, if the patient has acute apical periodontitis with serious symptoms, obturation is not indicated. These are emergency conditions; therefore, it is recommended to resolve the early issues and postpone definitive treatment. AAA has been resolved in a single visit, while this is typically not suggested.