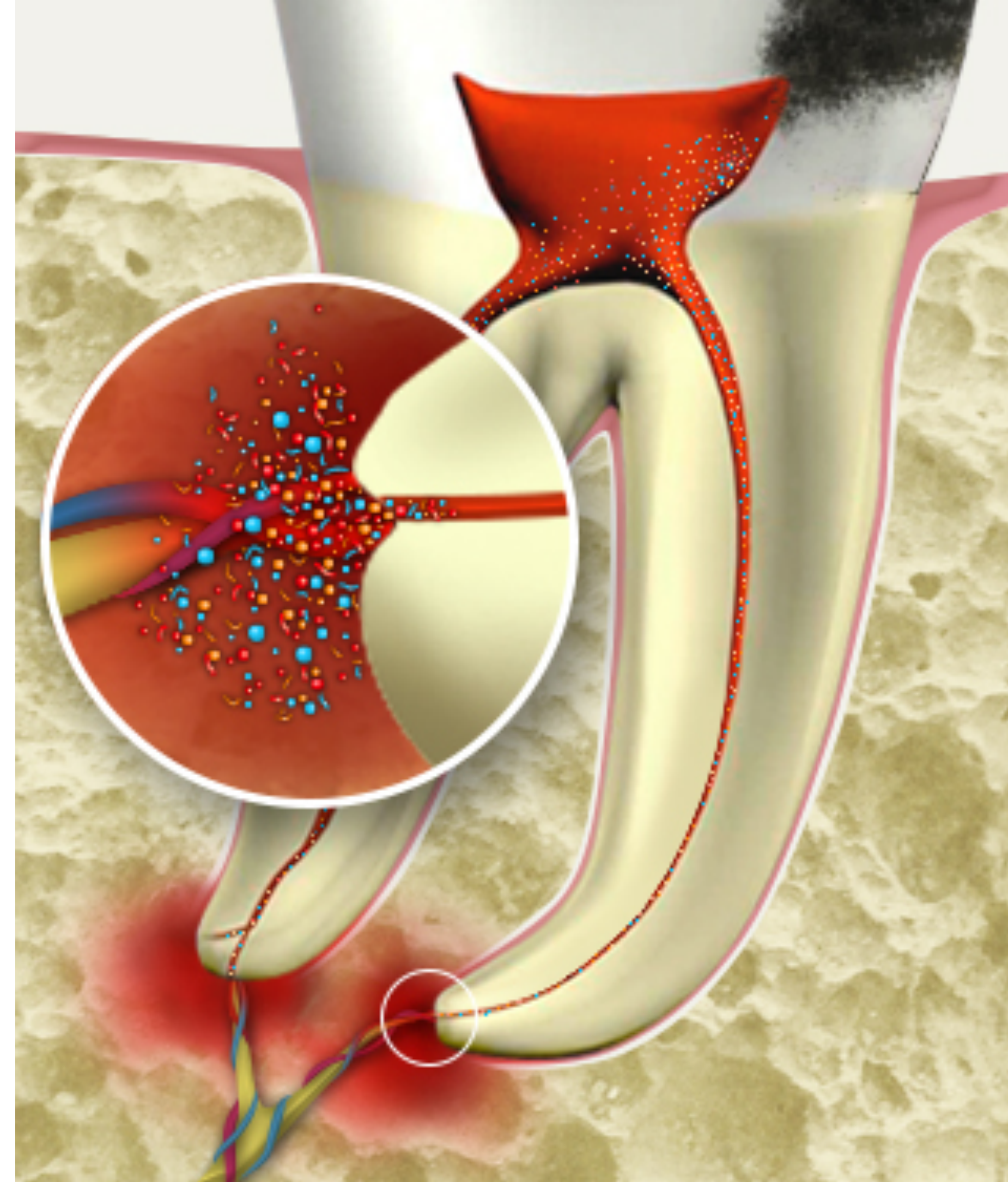


Endodontics is the specialty of dentistry that manages the prevention, diagnosis, and treatment of the dental pulp and the periradicular tissues that surround the root of the tooth.



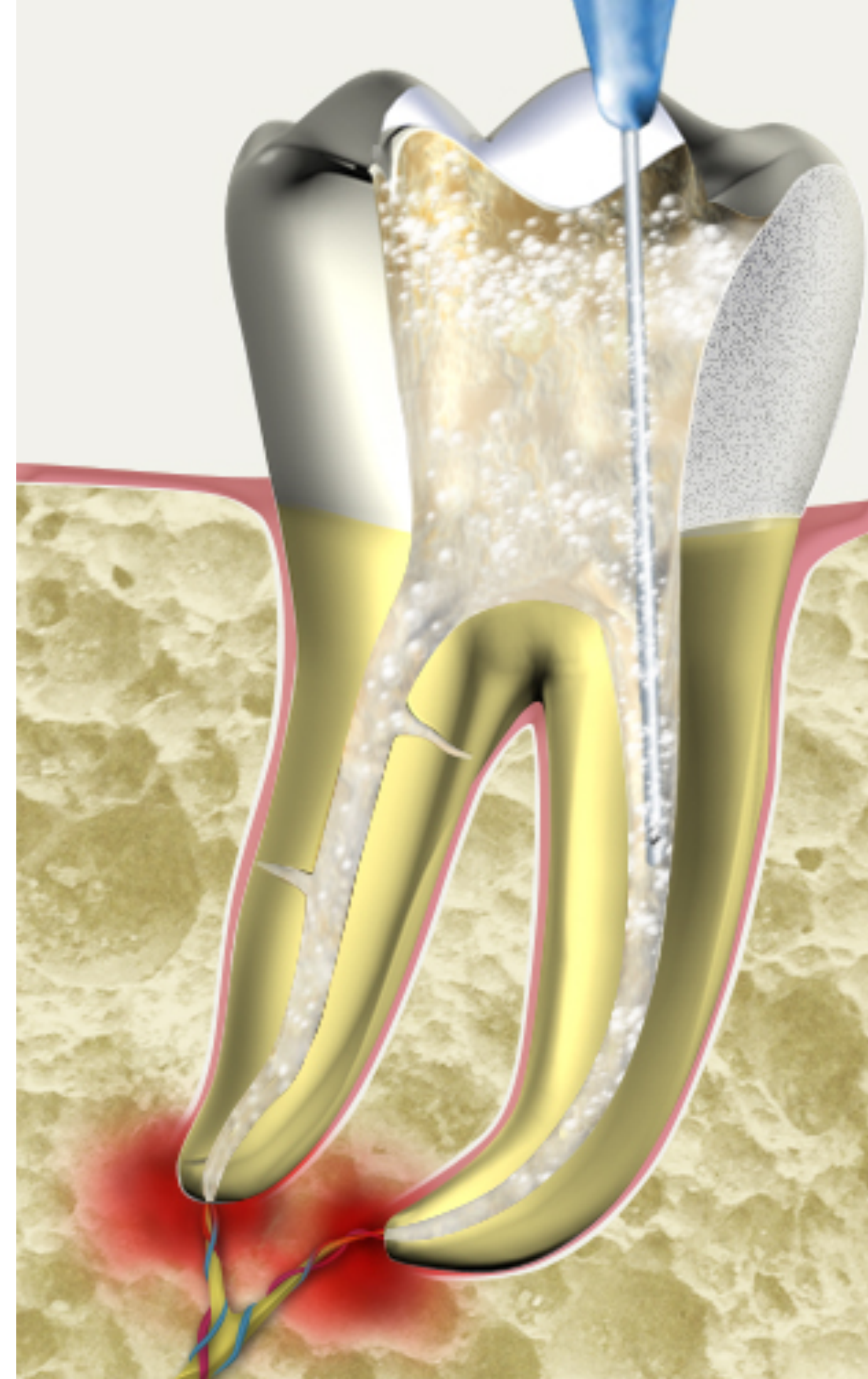
Objective of RCT

- Remove Diseased Tissue



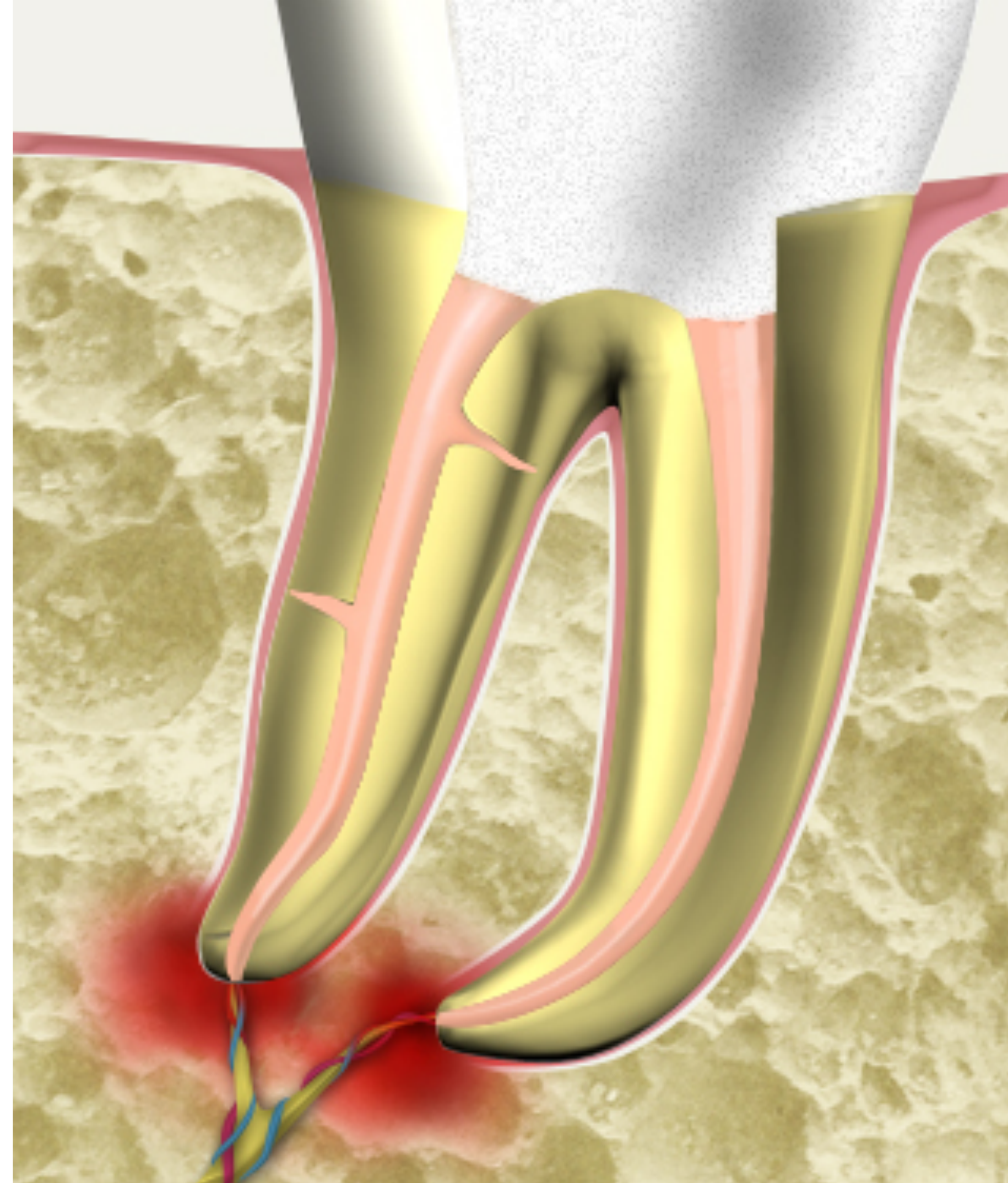
Objective of RCT

- Eliminate Irritants



Objective of RCT

- Prevent Recontamination



restoration of endodontically treated tooth

conditions	success	failure
Good endo and restoration	91.4	8.6
Bad endo and restoration	18.1	81.9
Bad endo and good restoration	69.6	30.4
Good endo and bad restoration	44.1	55.9

Causes of Pulpal Nerve Damage

- ⦿ Physical irritation
 - Most generally brought on by extensive decay.
- ⦿ Trauma
 - Blow to a tooth or the jaw.

Endodontic Diagnosis

- ⦿ Subjective examination
 - Chief complaint
 - Character and duration of pain
 - Painful stimuli
 - Sensitivity to biting and pressure
- ⦿ Objective examination
 - ▪Extent of decay
 - ▪Periodontal conditions surrounding the tooth in question
 - ▪Presence of an extensive restoration
 - ▪Tooth mobility
 - ▪Swelling or discoloration
 - ▪Pulp exposure

Diagnosis :-

● Is a personal and cognitive experience & a group of steps & procedures that will lead to know what the patient is suffering from

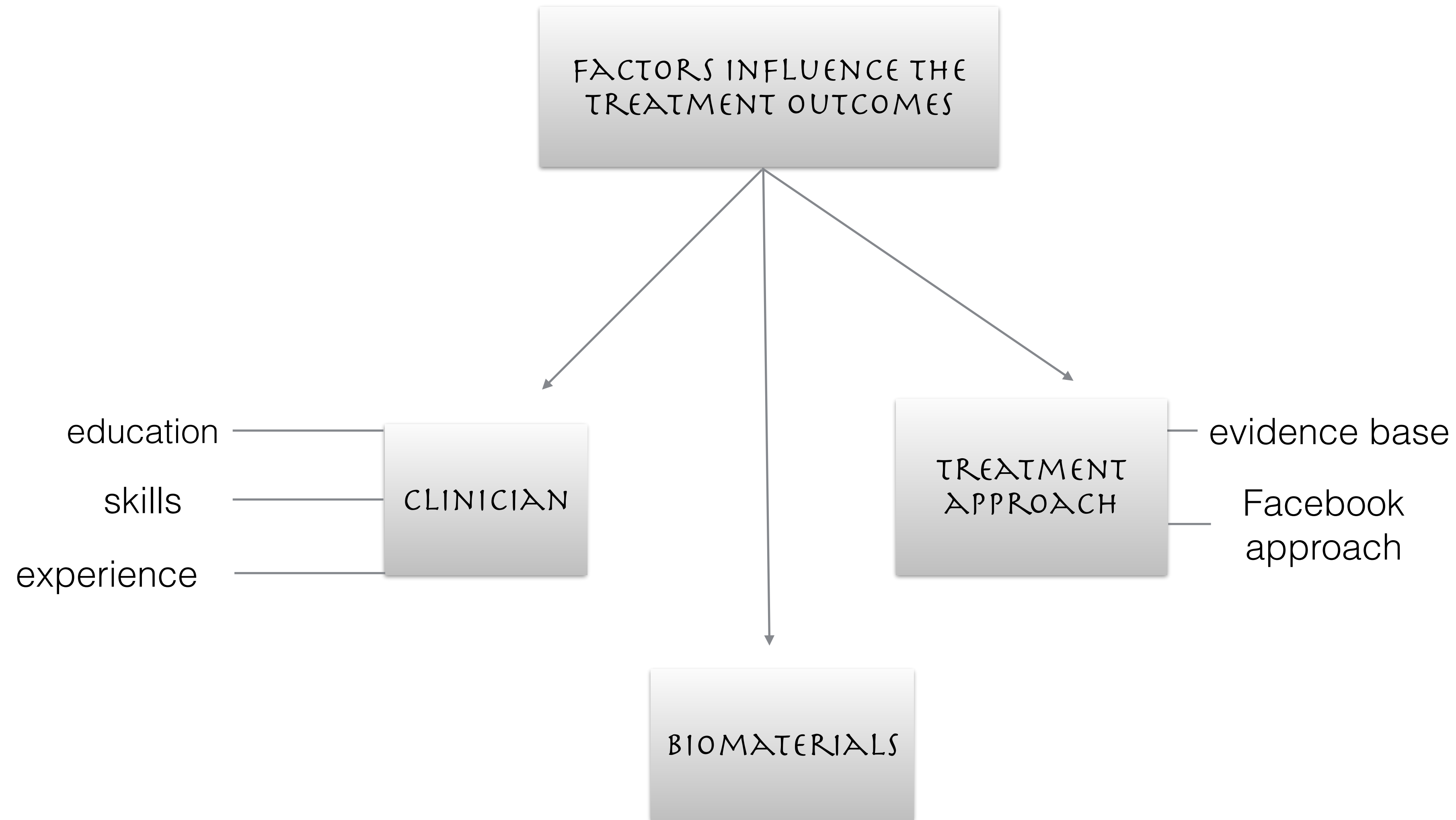
Diagnosis: It is the procedure that:

- 1- Accepts the patient.
- 2- Recognizes that he/she has a problem.
- 3- Determine the cause of the problem.
- 4- Develop a treatment plan to treat the problem.



Requirements of a diagnostician

- 1- Knowledge: A dentist must depend on himself and his scientific background.
- 2- Interest and curiosity: The dentist must be interested in solving the problem
- 3- Patience: The dentist needs time and patience to understand the reasons of the problem which not always are visible and needs some time and investigations to reveal the cause of the problem.



Systematic endodontic diagnosis

The road to the diagnosis



Systematic endodontic diagnosis

The road to the diagnosis



History

A complete dental and medical history should contain the vital signs, give early warning of unsuspected general disease and find risks to the health patient (during treatment) and the dental staff.

Chief complain. It is a description of the dental problem of the patient.

Present dental illness. Pain is the main reason for the patient's complain. It ranges from dull to severe which indicates the severity of the problem. It may indicate the source which may be dental or the surrounding structures.

Medical history. It is very important in patients with medical problems that may interfere with the dental treatment as history of bleeding, heart diseases, diabetes. Any medications taken by the patient may affect the dental procedure as aspirin.

Systematic endodontic diagnosis

The road to the diagnosis

Clinical examination

Extra oral

asymmetries

swelling

changes in color

bruises

enlarged lymph nodes

temporomandibular joint



Systematic endodontic diagnosis

The road to the diagnosis

Clinical examination



Systematic endodontic diagnosis

The road to the diagnosis

Clinical examination



Systematic endodontic diagnosis

The road to the diagnosis



Clinical examination

intraoral examination

- teeth
- occlusal contact
- oral vestibules
- buccal mucosa
- swelling
- sinus tract
- color changes



TRACING OF SINUS TRACT



A thin gutta-percha point is placed through the tract until resistance is felt



A radiograph is exposed to see the path of infection to the source.

intra-oral examination

The oral vestibules and buccal mucosa should be examined for localized swelling and sinus tract or color changes. The lingual and palatal soft changes should be then checked. Finally the teeth should be inspected for a carious lesion, faulty restoration, loss of teeth, presence of deciduous or supernumerary teeth.

Pulpal evaluation

There are many tests that indicate the pulpal health state. These tests reveal the extent of the problem and give a clue about the treatment as irreversible pulpitis needs endodontic treatment whereas reversible pulpitis may need a normal filling.

Pain history

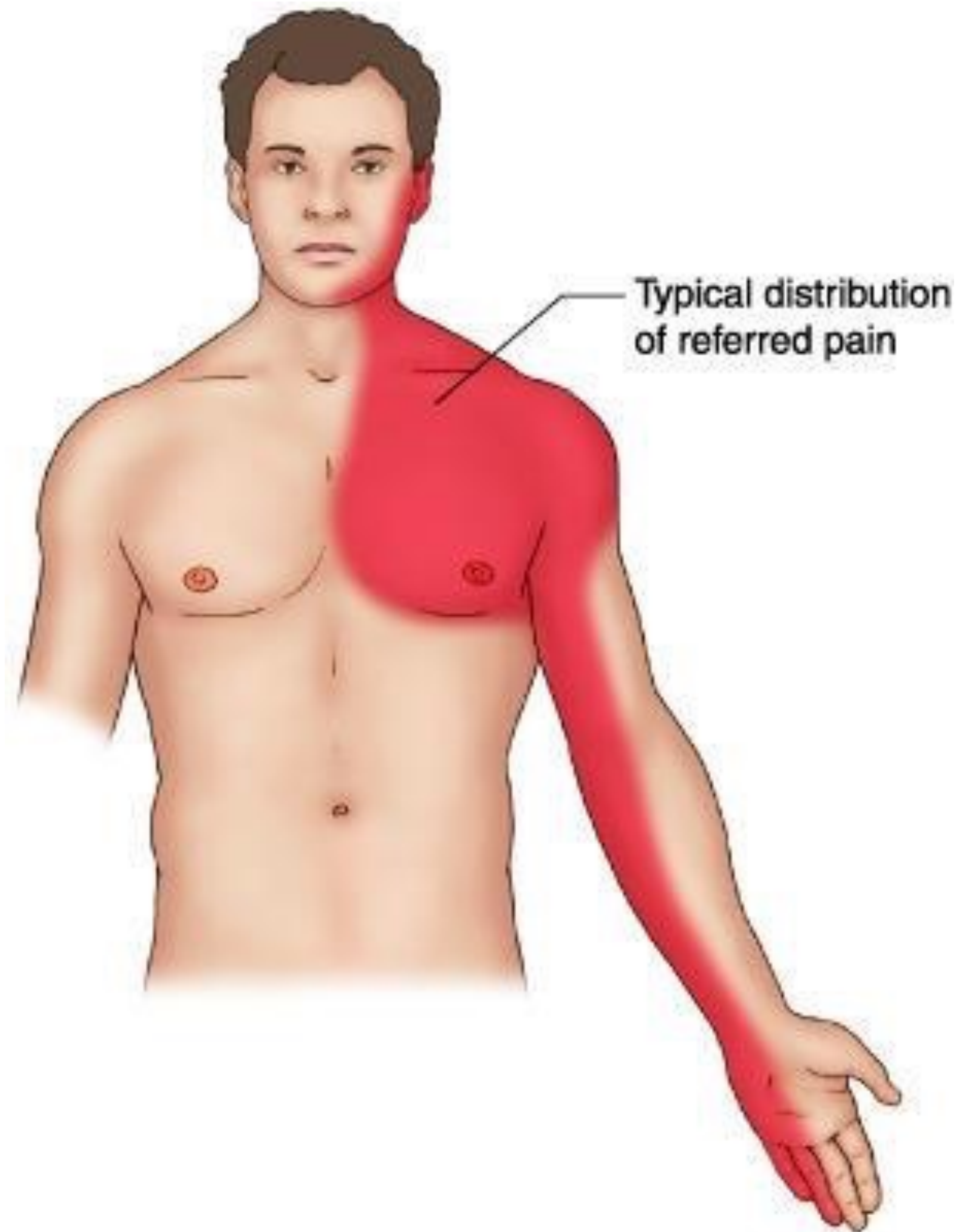
Initially, information on pain is obtained by asking questions regarding the current problem(s). This examination is subjective, frequently asked questions include:

- *Location.* Occasionally a patient may identify the location of the pain; however, one must be cautious as pulpal pain may be referred to a different area. Pain may be felt in any of the orofacial structures.
- *Type and intensity of pain.* The patient may describe pain in many ways. Examples include sharp, dull, throbbing, stabbing, burning, electric shock like, deep or superficial. The more the pain disrupts the patient's lifestyle because of its intensity, the more likely it is to be irreversible in origin.
- *Duration.* For how long after removal of the stimulus does the pain continue? The longer the pain continues after the stimulus, the more likely it is to be irreversible.
- *Stimulus.* Many different stimuli may initiate the pain, for example hot, cold, sweet, biting, posture. Alternatively the pain may be spontaneous. Special tests may be selected on the basis of what causes the main complaint.
- *Relief.* Pain-relieving factors, especially type and frequency of analgesics, antibiotics, sipping cold drinks.

Periodontal evaluation

The complete diagnosis is performed when examination is done to the tooth and surrounding tissues. The periodontal pathology as gingivitis and periodontal pockets may affect the pulp therefore periodontal treatment may be necessary before/with the endodontic treatment.

REFERRED PAIN



Diagnostic Aids

- ⦿ ▪Palpation
- ⦿ ▪Percussion
- ⦿ ▪OcclusalPressureTest
- ⦿ ▪Transillumination
- ⦿ ▪Thermal Tests
- ⦿ ▪ElectricPulpTest
- ⦿ ▪AnestheticTest
- ⦿ ▪Test Cavity