**Dental hygiene process of care**

* **Assessing the patient**: This includes, but is not limited to, a full review of the patient's medical history, necessary x-rays to be taken, a clinical exam, and a periodontal assessment by probing and exploring areas of the patients mouth. During this stage a thorough documentation must be implemented.
* **Dental hygiene diagnosis**: Assessing of data pertaining to a client's condition/state in terms that will help identify problems so as to lead to a professional treatment plan/ therapies. The final diagnosis of disease and/or treatments solely lies with jurisdiction and/or approval granted by the doctor.
* **Planning**: creating a sequential treatment plan for the patient. The treatment plan will vary based on the patient's immediate needs.
* **Implementation**: Carrying out the plan in a timely and effective manner.
* **Evaluation**: Determining the effectiveness of the treatment plan that was administered. If ineffective a complete evaluation on how to approach the patient's needs differently

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**Scaling and root planing**

The objective of **scaling and root planing**, otherwise known as **conventional periodontal therapy**, **non-surgical periodontal therapy**, **deep cleaning**, is to remove or eliminate the etiologic agents which cause inflammation: [dental plaque](http://en.wikipedia.org/wiki/Dental_plaque), its products and [calculus](http://en.wikipedia.org/wiki/Calculus_%28dental%29) thus helping to establish a [periodontium](http://en.wikipedia.org/wiki/Periodontium) that is free of disease.

**Plaque**

Plaque is a soft, sticky mixture of bacteria, waste products from bacteria, and some food debris. It irritates the gums, or gingiva, and causes inflammation over time: gingivitis. The longer plaque is left on the teeth, the harder it gets. After 24 hours, some plaque hardens into calculus, otherwise known as tartar. Calculus is mineralized plaque and does not come off with the brush and floss anymore. The bacteria in plaque and calculus cause an ongoing state of inflammation called gingivitis. If left untreated, gingivitis can progress to a more serious disease called periodontitis. The most common treatment for periodontitis is scaling and root planing.

**Plaque build up and bone loss**

Because the bone is alive, it has cells in it that build bone, and cells that break down bone. Usually these work at the same speed, and keep each other in balance: it is called bone remodeling. The chemical by-products of ongoing inflammation stimulate the cells that break down bone, which now start working faster than the cells that build bone. The net result is that bone is lost, and the loss of bone and attachment tissues is called periodontal disease.

**Periodontal scaling**

Periodontal [scaling](http://en.wikipedia.org/wiki/Periodontal_scaler) procedures "include the removal of plaque, calculus and stain from the crown and root surfaces of teeth. Root planing is a specialized skill involving scaling of the root of the tooth, made up of cementum. Because cementum is softer than enamel, it is affected more by ongoing build-up and inflammatory byproducts. A smooth cementum provides less opportunity for bacteria to accumulate and form calculus, so root planing is an important part of stopping progression of periodontal disease, especially once deeper pockets have formed in the gums, which is really in the bone. Thus root planing is a specific treatment that removes the roughened [cementum](http://en.wikipedia.org/wiki/Cementum) and surface [dentin](http://en.wikipedia.org/wiki/Dentin) that is impregnated with calculus, microorganisms and their [toxins](http://en.wikipedia.org/wiki/Toxin).

The objective for periodontal scaling and root planing is to remove etiologic agents, which can cause inflammation to the gum tissue and surrounding bone. Common etiologic agents removed by periodontal therapy include dental plaque and tartar (calculus). Scaling and root planning is one of the most effective periodontal methods of treating gum disease before it becomes severe.

Because in periodontal disease pockets form that are deeper than the usual gingival depth, such scaling and root planing are often referred to as **deep cleaning**, and may be performed using a number of dental tools, including [ultrasonic](http://en.wikipedia.org/wiki/Ultrasound) instruments and hand instruments, such as [periodontal scalers](http://en.wikipedia.org/wiki/Periodontal_scaler) and [curettes](http://en.wikipedia.org/wiki/Periodontal_curette).

Removal of adherent plaque and calculus with hand instruments can also be performed prophylactically on patients without periodontal disease. A *prophylaxis,* refers to scaling and polishing of the teeth in order to prevent oral diseases. Polishing does not remove calculus, only some plaque and stains, and should therefore only be done in conjunction with scaling.

Sometimes a device may be [electric](http://en.wikipedia.org/wiki/Electric), known as an [ultrasonic](http://en.wikipedia.org/wiki/Ultrasound) or sonic scaler. Ultrasonic scalers vibrate at a frequency that breaks down bacterial cell membranes and removes both plaque and calculus. Hand instruments are used to complete the fine hand scaling that removes anything the ultrasonic scaler left behind.

Although the final result of ultrasonic scalers can be produced by using hand scalers, ultrasonic scalers are sometimes faster and less irritating to the client. Ultrasonic scalers do create aerosols, which can spread pathogens when a client carries an infectious disease. Research shows no difference in effectiveness between ultrasonic scalers and hand instruments] Of particular importance to dentists themselves is that use of an ultrasonic scaler will greatly decrease their likelihood of getting carpal tunnel syndrome (or other similar forms of RSI.)