

Improving the Fit of a Full Denture

1. CONSIDER YOUR POST DAM TECHNIQUE.

The location and design of the post dam (also called posterior palatal seal) can affect fit. The best way to do this is through clinical assessment and indication. Contrary to popular belief, there is no single post dam design and location that the laboratory can determine that works for all patients. This is because the landmarks the lab uses - the fovea palatini and the hamular notch - to determine the vibrating line vary so widely from patient to patient. Studies indicate that the location of these landmarks fluctuates from directly in line with the fovea (25% of patients) to as much as 6mm posterior to it.

In order to identify the appropriate area for post dam placement, the dentist must first locate the imaginary line or area known as the vibrating line, which divides the hard and soft palates. He must then assess the patient's throat form classification, tissue displaceability and the role of the individual anatomic landmarks. This assessment is done by oral palpation by the doctor; he locates the vibrating line by asking the patient to say "ah" or blow air through his pinched nose to inflate or lift the vibrating line. He then marks those landmarks (fovea palatini, hamular notch and vibrating line) in the patient's mouth using a water-color pencil. When he takes the impression, the marks are transferred to the impression and the poured model, indicating the landmarks to the laboratory.

2. CONSIDER YOUR RELINE TECHNIQUE (*Static vs. Functional*).

A static reline impression can usually be taken in one patient visit because it is made with a quick-setting material (5-10 minutes) while the patient is in centric occlusion. The impression is then removed and sent to us for the relining procedure.

A functional reline impression requires a two-part procedure. The reline impression material (also called tissue conditioners, pastes or putty) is applied to the patient's denture, then placed in the mouth. The patient leaves with the material still in place and then returns several hours later, or even the next day, depending on manufacturer's instructions. (Remember that we must have a case before 10:00 a.m. in order to reline it in the same day if you are in the Midlands area.) During that time, the material molds to the patient's tissue during function (i.e., chewing and clenching). When the patient returns to the office, the dentist or Expanded Duty Dental Assistant may pour the reline impression or call us to fabricate the reline. If poured in the office, please be sure the model is placed intaglio up (tray side down, stone side up).

A functional reline is far superior to a static reline because it involves longer contact between the base and the tissue, and is subject to the forces of mastication which better mold the material. However, many doctors and patients choose the static reline because it is an easier, faster technique.

Proper communication between the dental team is essential to determine which type of reline is best for the particular case.