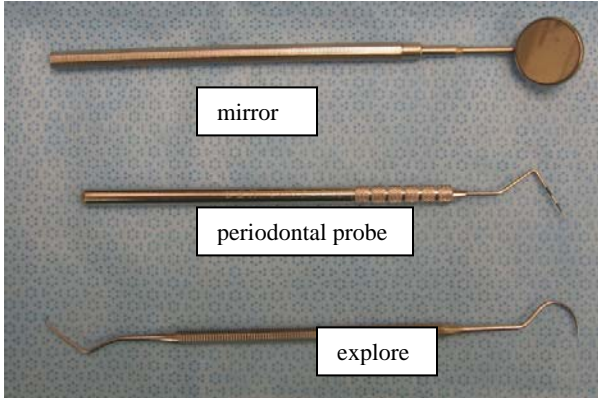


## 5 Oral Examination



You will need:  
Bright spot light (flashlight or similar).  
Dry mouth (have patient swallow).  
Intraoral mirror  
Periodontal probe  
Explorer (optional)

Have the patient in a position that is comfortable for YOU, and provides good visibility. This will probably be with the patient reclined or head tipped back.



*photo of reclined patient*



*photo of head tipped back*

### **If there is “NO” complaint:**

If there are no complaints, then you can provide a general exam, looking for teeth and gum problems that have not yet become painful. You may start with any area, but we recommend that you begin in the same area each time. For example, begin in the upper right backmost tooth and proceed around the arch checking each tooth in sequence for cavities. Then go to the lower left backmost tooth, and continue until you reach the right side again. Then begin checking the gums. Start in the same area of the mouth as you did with checking teeth.

## Teeth



Check all surfaces of teeth. Since you do not have a drill, just look for true cavities with broken down enamel such as in the photo to the left. Decay may be present under enamel, but without a drill, it is difficult to remove the outer enamel.

## Gums

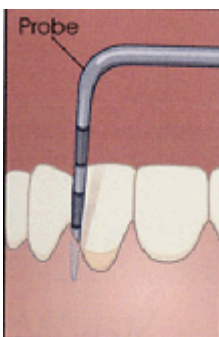
Look for these three things:

- 1) Condition of gums (redness, bleeding, firmness)
- 2) Probing depth around tooth
- 3) Calculus



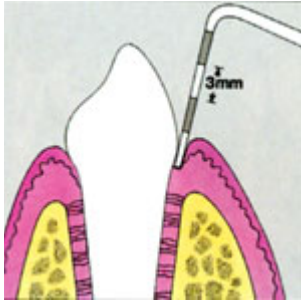
Look at the overall condition of the gums. Healthy gums are tight against the teeth with no bleeding when probed gently. The papillae are not enlarged or loose.

*photo of healthy gums*

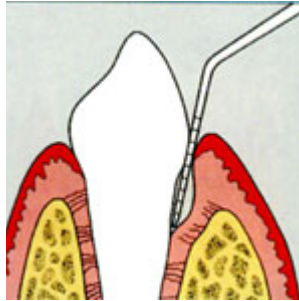


Use the probe to measure depths of the space under the gum line. Be gentle. It does not require much pressure. Check a few places along the gums around each tooth (such as lingual, facial, distal, and mesial). As you gain experience, you will find that you can determine how healthy a patient's gums are with fewer probing areas. At the beginning it is better to check more areas.

The deeper the pocket around a tooth, the more difficult it is to keep clean. This leads to gum infection, pain, loss of bone, and loose teeth. A healthy depth is generally less than 3-4 mm. Pocket depths over 4 mm are increasingly more difficult for the patient to clean by themselves and will require cleaning by a dental health worker.



*healthy depth (less than 3mm)*



*unhealthy depth (greater than 3mm)*

Feel for calculus using a probe or explorer. You may not be able to see any calculus, but you can feel it with the explorer. Gently drag the explorer over the surface of the root under the gum. If there is no calculus, it will feel smooth. If there is calculus, it will feel rough, bumpy, or even “click” over calculus on the root surface.

In general:

**Healthy** if: 3mm probing depths or less **without bleeding** or calculus.

**Gingivitis** if: 3mm probing depths or less **with bleeding** and/or calculus.

**Periodontitis** (gum disease) if: **Greater** than 4mm probing depth. The greater the depth of the sulcus, the worse the disease.

## If there “IS” a complaint:

Focus first on the patient’s area of complaint.

Ask what the problem is.

### Pain

Ask where it hurts.

- 1) If a **tooth** is painful, then **ask**:
  - a) How long has it hurt? (the longer it has hurt the less likely it will get better on it’s own)
  - b) How severe is the pain? (the more severe the pain, the more likely the tooth should be pulled as opposed to placing a filling).
  - c) Does it begin hurting without doing anything to it? (Pain that begins without doing anything such as eating, cold or sweets is most likely due to infection of the pulp, and so cannot be fixed with a filling. The tooth may need to be pulled)
  - d) Does it hurt to cold? If yes, how long? (No pain to cold doesn’t necessarily mean that the tooth is completely healthy. It may mean that the nerve is completely dead, and the infection has spread into the bone. Pain that lasts more than a few seconds to cold is likely due to infection of the pulp that cannot be fixed with a filling and should be pulled. Short pain can likely be stopped by filling any cavity that is present.)
  - e) Do you notice a bitter taste from the tooth? (This is a sign that the tooth pulp may be dead, and infection has spread. The tooth should be pulled if there is a large cavity, or gums cleaned if you find it is from gums and there is no cavity.)

Now:

**Look and feel** for decay on the tooth or nearby teeth. Use the explorer to feel for decay under the gum line. (Ask yourself if it looks to be into the pulp, close to the pulp, or shallow? Could the cavity be causing the symptoms?)

**Tap** on the tooth and nearby teeth. (Severe pain to tapping is a sign of an infection)

**Press (palpate)** the gums near the tip of the root. (Pain to pressing is a sign of infection that has spread from the tooth into the bone).

**Probe** the gums to check their health. (Are there any deep pockets? Is there any pus coming from the sulcus? These are signs of potential causes of the pain.)

If there is a source of ice, you may wish to confirm any symptoms of the patient’s response to cold. However, if you have no ice, you will need to rely upon what the patient told you about any reaction to cold.

- 2) If the **gums** are painful, then **ask**:
  - a) Where is it?
  - b) Is it everywhere in your mouth, or in one area? (Generalized problem such as gingivitis, versus an infection in one area)

- c) Is it a severe pain, or a dull ache? (A strong, severe pain is likely due to an established infection in the area. A dull ache can be a result of something caught under the gums, or the beginnings of an infection.)

**Look for:**

**Probing depth** around teeth in the area of complaint.

**Calculus** or debris stuck in the gums around the area.

**Pus**

**Bite marks** from the opposing arch of teeth. Sometimes with very worn teeth, the opposing teeth may be cutting the gums while chewing.

**General appearance** of the gums. (Are they red, swollen, bleed easily?)

3) If the **Tongue or Cheek** is painful then **ASK:**

- a) How long has it hurt?
- b) Do they remember biting it?
- c) Where does it hurt?

The tongue is covered by many tiny hairs, called *papilla*. Occasionally, these hairs become infected and fall off, leaving a bright red patch. It may be due to poor diet, stress, or viral infections. Usually the tongue becomes better on it's own after just two weeks. If the tongue does not improve after this time, it could be from something more serious, so the patient should see a physician.



*glossitis*



*glossitis*

## Swelling:

Not all swellings in the mouth come from dental infections. If you are uncertain of what is causing the swelling do not take out any teeth, and have the patient seek other advice.

Swellings in the mouth generally come from three sources:

1. Infection (most common and for which there is usually also pain)
2. Plugged or infected salivary glands
3. Tumors (very rare. The patient may also complain of numbness)

**ASK:**

- **How long** have you had it? (If short time and quickly growing it's more likely an infection).
- Does it **increase** before and/or during **eating**? (If yes, it could be a plugged major salivary gland such as the parotid or sublingual gland. If "no", then it is unlikely a plugged major gland, but could be a minor gland.)
- Do you have any **numbness** on that side? If yes, it could be a tumor. However, remember that these are extremely rare.
- Have you had a **tooth ache** in that area? If the patient has never had pain with a tooth, it could be an infected gland (such as mumps). A tooth may no longer be painful, but tooth pain in the past is a strong sign of an infected tooth.

**LOOK** for:

- **Decayed teeth** in the area. Ask yourself if it could be into the pulp?
- **Mobile teeth**. Try to gently move the teeth.
- **Probing depths** of the teeth in the area.
- **Saliva** from *parotid* and *sublingual* ducts. (Dry the *sublingual duct*. Press your finger on the soft tissue out of the mouth just toward the midline of the jaw, and draw your finger toward the chin. Clear fluid should come out of the duct. If **no** fluid comes from the duct, or **pus** comes from the duct, they should see a physician or dentist. Do the same for the *parotid duct*. Press the neck, just behind and below the ear, and draw your fingers toward the front of the face. Clear fluid should come from the duct near the upper first molar.)
- **Location** of swelling. Swelling on the lower lip or under tongue can be from a plugged minor salivary gland. Swelling of the parotid gland (not directly around a tooth) can be an infection of the gland such as mumps.



*photo of mucocele (labial)*



*photo of mucocele (ranula) sublingual*



*photo of mumps*

## **Sores:**

### **Ask:**

- How long has the patient had the sore?
- Have they had this or similar sore in the past?
- Do others in the family or community have similar sores?

Many sores are caused by viruses, and heal in less than two weeks. If it has been longer than two weeks, they should see a physician. Many mouth sores can be passed to other people through kissing, sharing drinks, or similar contact. Instruct the patient to avoid these activities until it heals so that they do not pass it to others.

## **Bleeding gums:**

### **Ask:**

- What do they do to keep their teeth clean? (If nothing, it may be a result of not cleaning well. If it sounds like they are cleaning their teeth well, it may be from a more serious medical problem)
- Does it happen on its own, or only with attempting to clean their teeth?
- Do they feel sick in any other ways? (if yes, they may have a more serious medical problem)

### **Look for:**

- Plaque.
- Calculus.
- The condition of the gums (Ask yourself if they are excessively red, swollen, bleeding)

If there appears to be plaque and/or calculus, proceed to follow the directions in the chapter for Treatments under gingivitis (note difference between bleeding without calculus versus bleeding with calculus). If the gums appear to be bleeding spontaneously, and are inflamed but there is no plaque or calculus, they may have a more serious medical problem, and should see a physician.

## **Chipped Teeth**

Consider chipped teeth the same as decayed teeth. Just as with a normal exam, ask similar questions, and look for similar conditions. In addition, ask and look for the following.

### **Ask:**

Does it, or has it ever hurt? (if it has hurt, then follow the outline for tooth pain earlier in this chapter).

### **Look for:**

- A small point of red in the depth of the tooth chip. This point of red may be the pulp, in which case bacteria have entered the tooth, and it will develop into *pulpitis*.
- Location of chip. Ask yourself, “Can the patient keep it clean”? If it is chipped in an area they can keep clean by brushing, such as along the buccal or lingual surfaces, it may not need to be treated.

**There are two conditions of the jaw that while extremely rare are simple to fix.**

**Unable to close mouth (Dislocation):** Sometimes the jaw opens too widely and locks open. This may happen after working on a patient. It is easily fixed by grasping the jaw with both hands. Orient your hands such that your thumbs are on the *occlusal* surface of the lower jaw, and fingers are under the mandible.

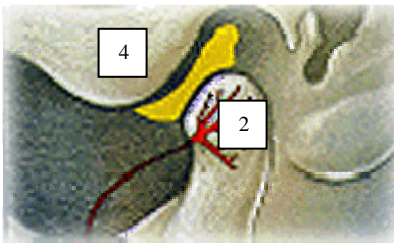


*hand placement for dislocation*

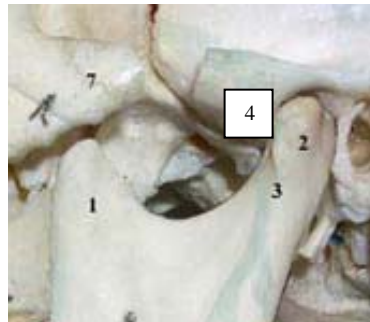
Gently, pull the jaw down (**opening it wider**) before pulling it **forward**, and then gently depressing the angle of the mandible. Keep depressed pressure on the jaw while the patient **allows** the jaw to slide back into normal position.

**Do not attempt to force the jaw into position.**

With dislocation, the condyle (2) is in front of the eminence (4). You simply need to guide the condyle down before allowing it to slide back along the natural path of the upper bone.



*Jaw joint with cartilage*



- 1 – Coronoid process.
- 2 – Condyle
- 3 – Neck
- 4 – Eminence

*Jaw joint anatomy*

## **Fracture:**

This will likely require the patient to go to hospital. However, you can provide first aid in the following way. Some patients may not wish or be able to go to hospital. If this is the case, the following will allow for best possible healing.

Move the jaw so that the teeth bite completely and normally together. Then bandage the jaw firmly to the skull so it does not move. The patient must not chew for six weeks. They may adjust the ties to make them more secure, but the patient must not chew anything. They must only **drink** liquid foods with the bandage on. Stress to them that if they do not keep the jaw securely fixed in this position, or they choose to chew, it will heal poorly and they will have difficulties eating for the rest of their life.



*fracture bandage*