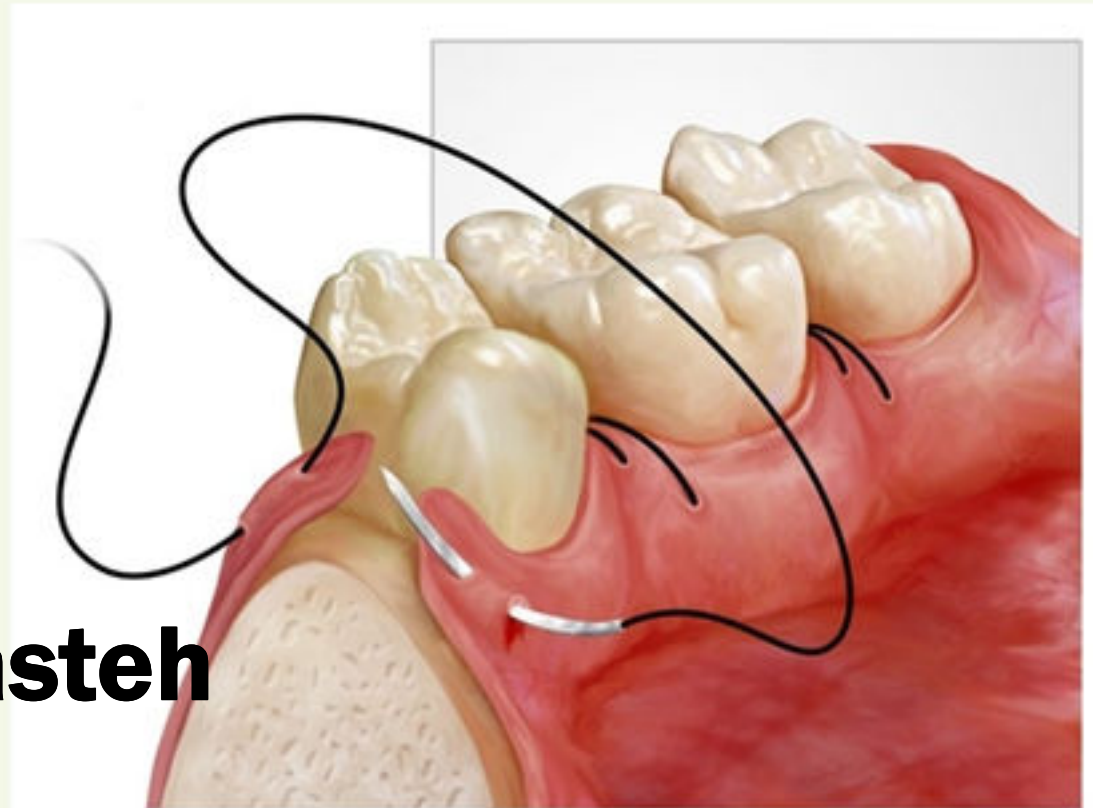


Oral Surgery And Infections

By: Dr Arash Khojasteh



Oral Surgery

- The diagnostic and surgical treatment of diseases, injuries, and defects involving both the junctional and the esthetic aspects of the hard and soft tissues of the oral and maxillofacial regions.



Types of Oral Surgery

- Impacted tooth removal
- Alveoplasty
- Abscesses
- Osteomyelitis
- Fractures
- Cysts, tumors
- Dental implant placement
- Maxillofacial prosthetics
- Immediate denture
- Facial esthetics
- Cleft lip/ palate
- TMJ disorders
- Salivary Gland Obstruction

Patient Instructions

- Have the client use a soft tooth brush with a simple brushing technique.
- Give instructions of prosthesis care.
- Recommend what to include and not include in the diet.
 - Promotion of healing
 - Protein, vitamin A, C, and Riboflavin
 - Tissue resistance
 - Diet variation including all food groups
- Provide instruction sheets for clients to take home.
- When instructing about diet, explain in quantity or servings.

Pre-surgical Instructions

- Explain procedures for anesthesia and surgery
- Explain alcohol and medication restrictions
 - Some medications will interfere with the anesthetic and other drugs provided during or after the treatment
- Assess whether the client will need transportation to and from the appt. ie. when sedation is used...
- Tell them to get a good nights rest the night before.
- Wear loose and comfortable clothing.
- Ask to remove contact lenses or any prosthesis.
- Explain the number of hours before surgery the client should stop their intake of food and liquid.

Post-surgical Instructions

- If bleeding persists, place a gauze pad or cold wet tea bag over the area for ½ hr. Bite firmly!
- Don't rinse for 24 hours.
- After 24 hours rinse with warm salt water after brushing and every 2 hours.
- Brush more thoroughly but avoid area of surgery.
- Get at least 8 – 10 hours of rest each night.
- Avoid strenuous exercise for the first 24 hours.
- Don't smoke for 24 hours.
- Use a pain relieving medication prescribed by the dentist.
- Apply ice pack 15 min on and 15 min off.
- Include phone number the client can call after hours in case of complications.
- Do not suck from a straw for 24 hours

Diet

- Indications for a Liquid Diet
 - Jaws wired together
 - All clients who have a condition that makes it hard to open their mouth
- Indications for a Soft Diet
 - Client with no appliance or with a single appliance
 - Client who has been maintained on liquid diet throughout the treatment period.



Diet Planning Hints

- This is for the client who isn't hospitalized
 - Provide instruction sheets
 - Explain nutritional needs in servings
 - Show ways to vary the diet
 - Suggest the limitation of cariogenic foods

Client Preparation

- Reduce the bacteria count
 - Makes post-surgical infection less likely
- Reduce inflammation
 - Will lessen bleeding during surgery
 - Promotes healing
- Remove calculus
 - Prevents interference with the placement of surgical instruments
 - Prevents the breaking off of calculus
- Instruct the client in personal oral care
- Interpret dentists directions
- Motivate the client who will have remaining teeth
 - Prevents further tooth loss
- A complete debridement should be scheduled for a few weeks after surgery to insure the prevention of infection and assess tissues.

- The DH or DA may participate in suture removal, irrigation of the sockets, and other post surgical procedures when the client returns for his/her follow up.

DA's Responsibilities



DA's Responsibilities

- Maintain a clear surgical field
- Observe vital signs
- Reassure the client and help them to relax
- Provide pre/post operative instructions
- Make follow up call
- **DA MUST ASK IF THE CLIENT HAS TAKEN PRE MEDS IF REQUIRED!!!**

Holistic Approaches to OS

- Apply annatto after tooth extraction or gum surgery.
- Drink catnip tea or take in capsules to help you relax before dental treatment
- Use chamomile as a poultice for pain and swelling.
- Soak a washcloth in warm comfrey tea and use as a compress to relieve the pain of jaw and tooth fractures.
- Use the fresh tops of shepherd's purse to help stop bleeding after tooth extraction

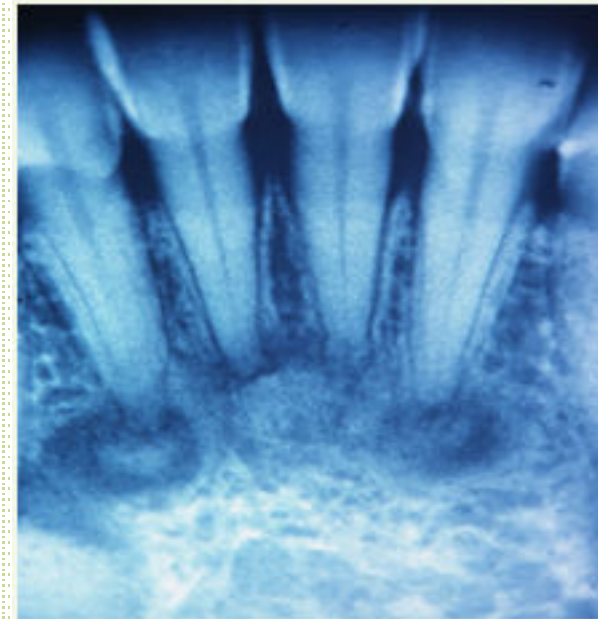


Use of Magnets can:

- **Acceleration of growth of new cells (speeding up wound healing processes)**
- **Suppression of pain (analgesic effect)**
- **Suppression of inflammation**
- **Widening of blood vessels**
- **Improving tissue flexibility**
- **Eliminating swelling**
- **Strengthening immunity**
- **Stimulating and stabilizing bone tissues**
- **Dramatic improvements in effectiveness of prescription medication and supplemental nutrients, vitamins and minerals**

Infections related to Oral Surgery

- Osteomyelitis

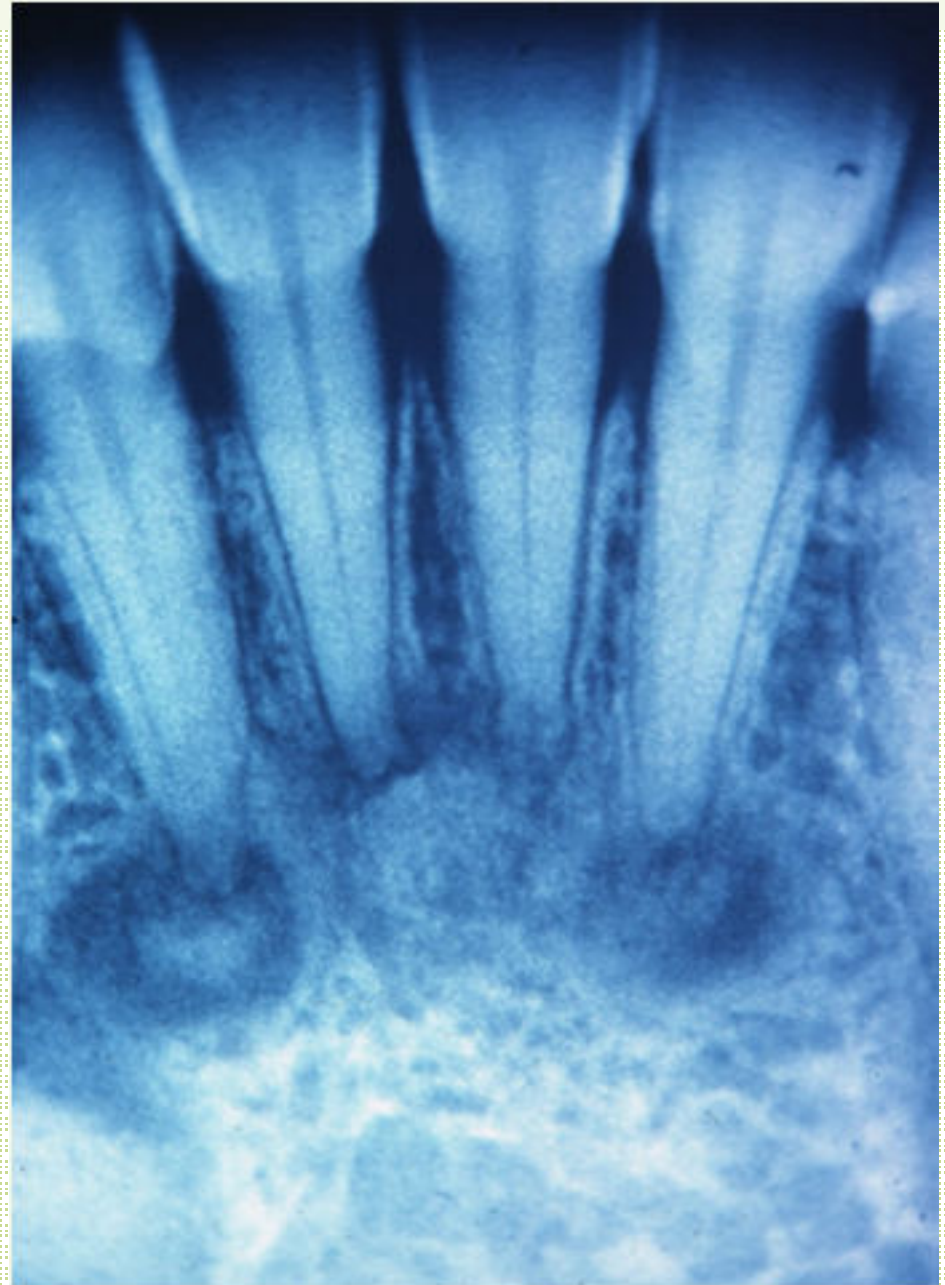


- Pericoronitis



Osteomyelitis

- An inflammation of the bone marrow that produces pus and affects the calcified components of bone.



Causes

- 1. acute periapical infection
- 2. pericoronitis
- 3. acute periodontal lesions
- 4. trauma-fractures and extraction of teeth
- 5. acute infection of the maxillary sinus

How is it Diagnosed?

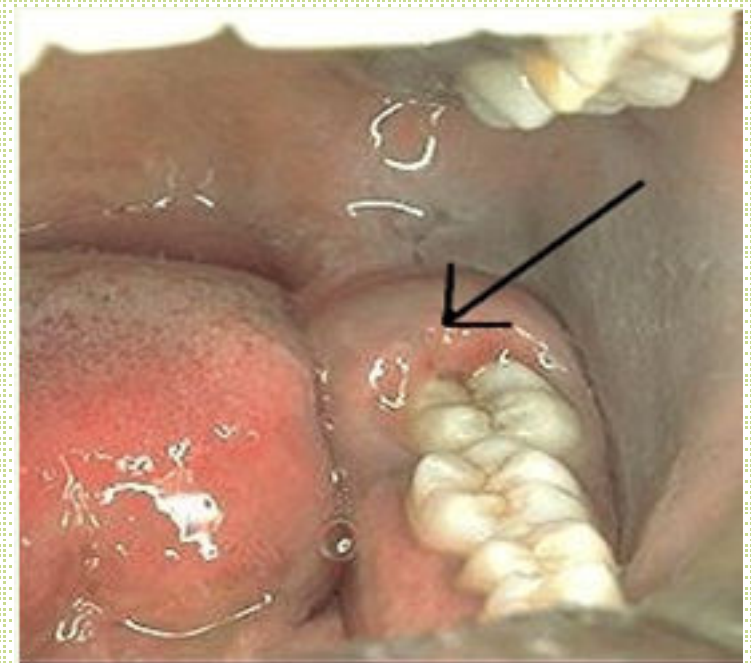
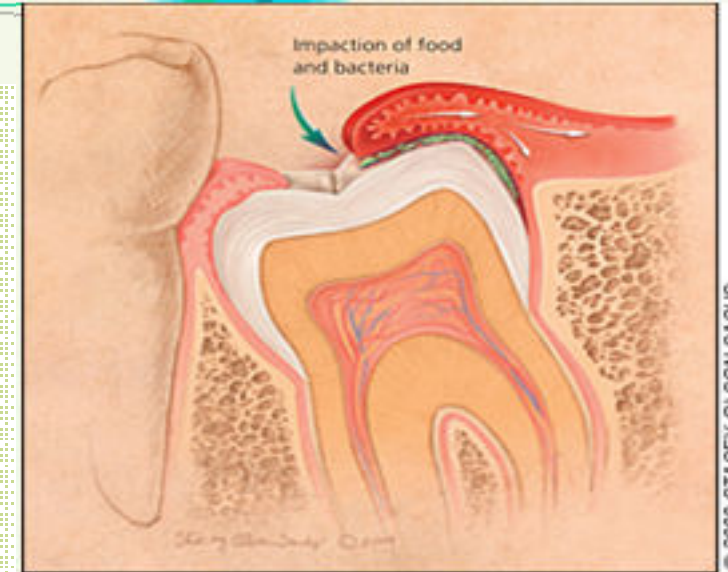
- Complete blood count
- Erythrocyte sedimentation rate
- C-reactive protein
- Needle aspiration or bone biopsy
- X-rays
- Radionuclide bone scans
- CAT scans
- MRI
- Ultrasound

Signs and Symptoms

- severe pain
- regional lymphadenopathy
- soreness of the involved teeth
- if the infection involves the mandibular canal, a paresthesia of the lip is common
- On radiographs:
 - decreased density of trabeculae
- multiple small radiolucent areas become apparent
- sequestra - irregular calcified areas separate from remaining bone

Pericoronitis

- Inflammation of the gingiva around a partially erupted tooth.
- Resulting from debris accumulating under the flap of tissue.
- Or from constant contact between the flap and the tooth in the opposing arch.
- Usually occurs in teenagers and young adults.
- Usually occurs in teenagers and young adults.
- Usually affects the mandibular third molars.



Signs & Symptoms

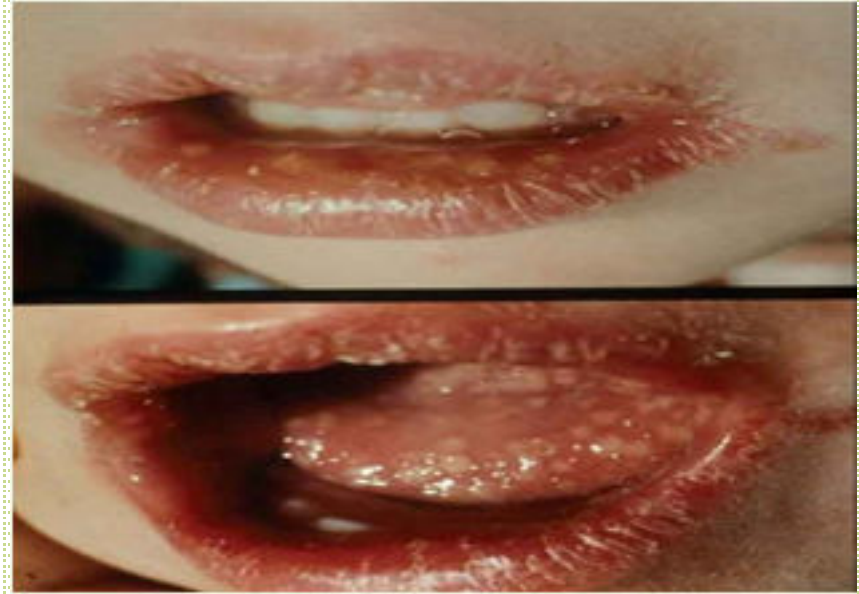
- Pain when chewing
- Bad taste
- Trismus
- Swelling in the neck and in the area of the tooth
- Fever
- Partially erupted tooth
- Red inflammed tissue around the partially erupted tooth
- Pus
- Pain when touched
- Enlarged lymph nodes

Treatment

- Irrigate under the flap of tissue with warm saline solution.
- Gently clean with a scaler
- Instruct the client to rinse with warm saline solution every 2 hours
- Antibiotics
- Surgical removal of the flap after antibiotic therapy
- Third molar extraction

Other Oral Infections

- Herpes



- Thrush



What is Oral Thrush?

- It is an infection in the oral cavity of yeast fungus, *Candida albicans*. It affects the mucous membranes of the mouth. It causes white patches in the mouth that can be very painful and make swallowing and chewing difficult.
- Thrush affecting the mouth and throat is also known as *oropharyngeal candidiasis*

Oral thrush



Symptoms of Thrush

- White cream coloured or yellow slightly raised spots in the mouth.
- When the creamy substance is scraped away wounds will be present and will bleed slightly.
- A burning sensation may be felt in the mouth and throat area.

Treatment

- Get the main condition that caused the thrush under control.
- Anti-fungal drugs will have to be either sucked on or a liquid that must be held in the mouth before swallowing to eliminate the fungus.
- If it spreads or becomes complicated, systemic treatment in the form of tablet or injection may be needed.

Coping with the Symptoms of Thrush

- Thrush can make the mouth very sensitive, this can make oral hygiene very difficult to maintain.
- Use an extra soft toothbrush.
- It is also helpful to rinse with a diluted solution of 3% hydrogen peroxide.



Herpes

- Herpes simplex is a common and usually mild infection
- A virus causes herpes
- Causes cold sores or fever blisters on the mouth and face
- Once introduced to the body it will live there for a lifetime
- Often with periodic symptoms or no symptoms at all



Herpes Symptoms

- Can take 4-6 weeks to heal fully
- May cause small pimples or blisters which will eventually crust over and scab
- May cause flu like symptoms; fever, swollen glands in lymph nodes in the head and neck region



How often will it occur? Why?

- depends upon the HSV type and how long the infection has resided in the body
- prolonged exposure to strong sunlight can trigger oral herpes
- individuals will discover what triggers outbreaks in their own bodies
- people who experience a strong initial outbreak can expect to have several recurrences a year

How is it Spread?

- Skin to skin contact
- if you have a “cold sore” and kiss someone, the virus will be transferred to that person
- if you have a “cold sore” and have oral sex, your partner will get genital herpes

no treatment or medication that will cure herpes but there is some to control it:

- 3 most common meds: *Acyclovir (Zovirax)*, *Valacyclovir (Valtrex)* and *Famciclovir (Famvir)*
- Episodic therapy means taking the medication only during an outbreak to speed up the healing process
- Suppressive therapy means taking antiviral medication daily



“the end”