



# BENIGN SOFT TISSUE LESIONS (EXOPHYTIC LESIONS)

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# BENIGN SOFT TISSUE LESIONS:



- **Inflammatory/Reactive Hyperplasia of Soft Tissue**

- Fibromas, Cowden Syndrome, Tuberous Sclerosis
- Fibrous Inflammatory Hyperplasias
- Pyogenic Granuloma
- Pregnancy Epulis
- Peripheral Ossifying or Cementifying Fibroma
- Gingival Enlargement

- **Benign Soft Tissue Tumors**

- Epithelial Tumors
- Vascular Lesions
- Neurogenic Lesions
- Lipoma
- Tumors of Muscle

# BENIGN SOFT TISSUE LESIONS:



## Inflammatory/Reactive Hyperplasia of Soft Tissue

- Nodular growths of the oral mucosa
- Size: may be large or small,
  - depending on:
    - the degree of the components of the inflammatory reaction
    - healing response are exaggerated

# BENIGN SOFT TISSUE LESIONS:



- The major etiologic factor:
  - chronic trauma from ill-fitting dentures
  - Calculus
  - overhanging dental restorations
  - acute or chronic tissue injury from biting
  - fractured teeth
  - levels of circulating hormones (pregnancy epulis)



# BENIGN SOFT TISSUE LESIONS:



- peripherally
- Clinical appearance: swollen, ulcerated, and red to purple lesions due to dilated blood vessels
- Erosion of the underlying cortical bone rarely occurs
  - if noted, an aggressive process or even malignancy is involved
- An excisional biopsy
- Incisional biopsy to establish the diagnosis



# BENIGN SOFT TISSUE LESIONS:

## Fibromas



- Pedunculated or sessile (broadbased)
- also called traumatic or irritation fibromas
- small ( $>1$  cm in diameter are rare)
  - Multiple fibromas: Cowden syndrome or tuberous sclerosis
  - Cowden syndrome is inherited as an autosomal dominant trait.



# BENIGN SOFT TISSUE LESIONS:

## **Fibromas**



# Cowden syndrome

- Oral and perioral findings:
  - multiple papules on the lips and gingivae,
  - Papillomatosis (benign fibromatosis) of the buccal, palatal, faucial, and oropharyngeal mucosae
  - tongue is also pebbly or fissured.
  - Multiple papillomatous nodules (perioral, periorbital, and perinasal skin)
  - Lipomas
  - Hemangiomas
  - Neuromas
  - Vitiligo on the skin
  - café au lait spots on the skin
  - acromelanosis elsewhere on the skin

# Tuberous sclerosis

- an inherited disorder
- hamartomatous glial proliferations
- neuronal deformity in the central nervous system
- Fine wart-like lesions (adenoma sebaceum) occur in a butterfly
- distribution over the cheeks and forehead
- vascular fibromas have been described intraorally
- Characteristic hypoplastic enamel defects (pitted enamel hypoplasia)
- Rhabdomyoma of the heart and other hamartomas of the kidney, liver, adrenal glands, pancreas, and jaw are described.





# BENIGN SOFT TISSUE LESIONS:

## Fibrous Inflammatory Hyperplasia



## Epulis Fissuratum

- A reactive inflammatory lesion
  - associated with the periphery of ill-fitting dentures
  - histologically resembles the fibroma.
- split
  - by the edge of the denture, resulting in a fissure, one part of the lesion lying under the denture and the other part lying between the lip or cheek and the outer denture surface



Click to add title



# BENIGN SOFT TISSUE LESIONS:

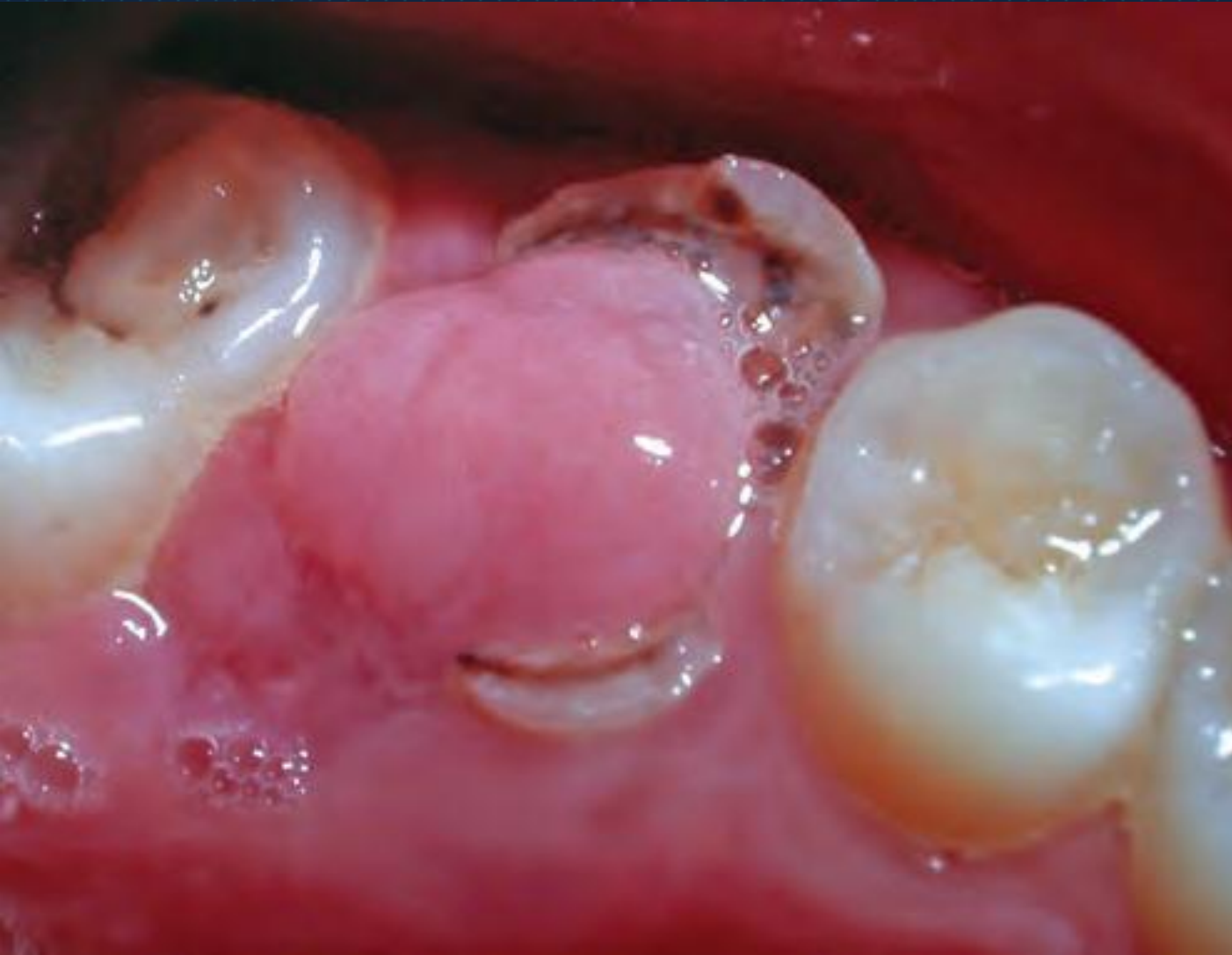
## Fibrous Inflammatory Hyperplasias



### Pulp polyps

- Chronic hyperplastic pulpitis
- occur when the pulpal connective tissue proliferates through a large pulpal exposure
  - fills the cavity in the tooth with a mushroom-shaped polyp
  - connected by a stalk to the pulp chamber
- Masticatory pressure may lead to keratinization of the epithelium covering these lesions.
- contain few sensory nerve fibers and are remarkably insensitive.
- The crowns of teeth affected by pulp polyps are usually so badly destroyed by caries that endodontic treatment is not feasible

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BENIGN SOFT TISSUE LESIONS:

# Fibrous Inflammatory Hyperplasias



## Inflammatory papillary hyperplasia

- develops on the central hard palate in response to chronic denture irritation
- Old and illfitting complete maxillary dentures appear to be the strongest stimuli, but the lesion is also seen under partial maxillary dentures.
- pathogenesis is unclear
  - usually associated with denture stomatitis due to chronic candidal infection.
- Red



BENIGN SOFT TISSUE LESIONS:

# Fibrous Inflammatory Hyperplasias



## Inflammatory papillary hyperplasia...

- bleed with minimal trauma
- may be covered with a thin whitish exudate.
- When the candidal infection is eliminated, either by removing the denture or by topical administration of an antifungal agent, the papillary surface becomes less erythematous than the rest of the palate and consists of tightly packed nodular projections.



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# BENIGN SOFT TISSUE LESIONS:

## **Pyogenic Granuloma**



- a hemorrhagic nodule
- most frequently on the gingiva
- has a strong tendency to recur after simple excision if the associated irritant is not removed
- close proximity to the gingival margin suggests that calculus, and overhanging dental restoration margins are important irritants that should be eliminated when the lesion is excised.
- ulcerated appearance

# BENIGN SOFT TISSUE LESIONS:

## **Pyogenic Granuloma...**



- Despite the common name for the lesion, a frank discharge of pus is not present; when such a discharge occurs, it is likely a fistula from an underlying periodontal or periapical abscess, the opening of which is often marked by a nodule of granulation tissue (parulis)

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# BENIGN SOFT TISSUE LESIONS:

## Pyogenic Granuloma...



## Pregnancy epulides

- Increases toward the end of pregnancy (when levels of circulating estrogens are highest)
- tend to shrink after delivery (when there is a precipitous drop in circulating estrogens).
- hormones play a role in the etiology of the lesion, secondary to an increase in angiogenic factor expression and a reduction in the apoptosis of granulation tissue
- do not occur in mouths that are kept scrupulously free of even minor gingival irritation, and local irritation is clearly also an important etiologic factor



# BENIGN SOFT TISSUE LESIONS:

## Pyogenic Granuloma...



- Both pyogenic granulomas and pregnancy epulides may mature and become less vascular and more collagenous, gradually converting to fibrous epulides.
- Small isolated pregnancy tumors occurring in a mouth that is otherwise in excellent gingival health may sometimes be observed for resolution following delivery, but the size of the lesion or the presence of a generalized pregnancy gingivitis or periodontitis supports the need for treatment during pregnancy.

# BENIGN SOFT TISSUE LESIONS: **peripheral ossifying fibroma**



- gingiva
  - it does not arise in other oral mucosal locations
- varies from pale pink to cherry red and is typically located in the interdental papilla region
- histologic evidence of calcifications that are seen in the context of a hypercellular fibroblastic stroma.
- occur in teenagers and young adults
- more common in women.
- elimination of subgingival irritants and gingival pockets throughout the mouth
- excision of the gingival growth



# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



- caused by local inflammatory conditions such as:
  - poor oral hygiene
  - food impaction
  - mouth breathing
- Systemic conditions such as:
  - hormonal changes
  - drug therapy
  - tumor infiltrates
- Histologically:
  - hypertrophy (an increase in cell size)
  - hyperplasia (an actual increase in cell number)
  - Edema
  - vascular engorgement

# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



### *Inflammatory Gingival Enlargement*

- occurs in sites of chronic suboptimal oral hygiene
  - accumulation of plaque
  - supragingival calculus formation
  - impaction of food
  - presence of aggravating factors such as orthodontic appliances
  - mouth breathing
  - hormonal changes
- tissues exhibiting a glossy edematous bright red or purplish red color and a tendency to hemorrhage on slight provocation



# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



### *Inflammatory Gingival Enlargement...*

- A fetid odor may result from the decomposition of food debris and accumulation of bacteria.
- Pseudopockets formed by gingival enlargement make the maintenance of good oral hygiene difficult, perpetuating a cycle of inflammation.
- Gingival inflammation affecting primarily the maxillary anterior region may be observed in mouth breathers.
- Hormonal changes (such as during pregnancy or puberty) may exaggerate the local immune response to local factors
- The impaired collagen synthesis associated with vitamin C deficiency (scurvy) may also complicate inflammatory gingival enlargement

# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



### *Inflammatory Gingival Enlargement...*

- professional débridement (supragingival scaling or subgingival root planing) and prophylaxis and correction of faulty restorations, carious lesions, or food impaction sites.
- Close followup after initial therapy is required to assess improvements in home care and tissue response that will dictate subsequent treatment options.



# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



## Drug-Induced Gingival Enlargement

- Drugs include:
  - anticonvulsants (principally phenytoin)
  - Cyclosporine
  - calcium channel blocking agents
- extent of inflammation, fibrosis, and cellularity depends on the duration, dose, and identity of the drug; on the quality of oral hygiene; and on individual susceptibility that stems from genetic factors and environmental influences.
- exert their influence not by direct regulation of extracellular matrix metabolism or proliferation of gingival fibroblasts but due to the dysregulation of cytokines and growth factors



# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



### Drug-Induced Gingival Enlargement...

- Phenytoin-induced gingival enlargement is the most prevalent, affecting approximately 50% of patients who use the drug for longer than 3 months.
- other anticonvulsants, namely:
  - valproic acid
  - phenobarbital,
  - vigabatrin
- The immunosuppressant agent cyclosporine causes gingival enlargement in 25 to 30% of adults and, notably, in greater than 70% of children
- Nifedipine and diltiazem are responsible for most cases of calcium channel blocker–induced gingival enlargement, with a prevalence of approximately 5 to 20%
- There are also reports following use of:
  - verapamil, felodipine, and amlodipine.

# BENIGN SOFT TISSUE LESIONS:

## Gingival Enlargement



## Drug-Induced Gingival Enlargement...

- After approximately 1 month of drug use, interdental papillae enlargement begins, usually in the anterior regions
- The attached gingivae are generally involved, although the enlargement may become more extensive, leading to gingival disfigurement and associated esthetic and functional complications.
- There are reports that cyclosporine-induced enlargements are less fibrotic compared with those caused by phenytoin or calcium channel blockers
- The diagnosis is easily established based on the history of chronic drug use and the clinical appearance

phenytoin



cyclosporine





آرام باش،

توکل کن،

صبر کن،

آستین مار بالا بزن،

آمگاه دستان خداوند را می بینی که زودتر از تو دست به کار شده اند.

# THE END...

