CLINICAL STOMATOLOGY CONFERENCE

DNSC D9910.00

November 7, 2007

Soft tissue tumors
Part 2

Overview

Benign
- Fibroma
- Pyogenic granuloma
- Epulis fissuratum
- Lipoma
- Granular cell tumor
- Congenital epulis (of the newborn)
- Hemangioma
- Neural lesions

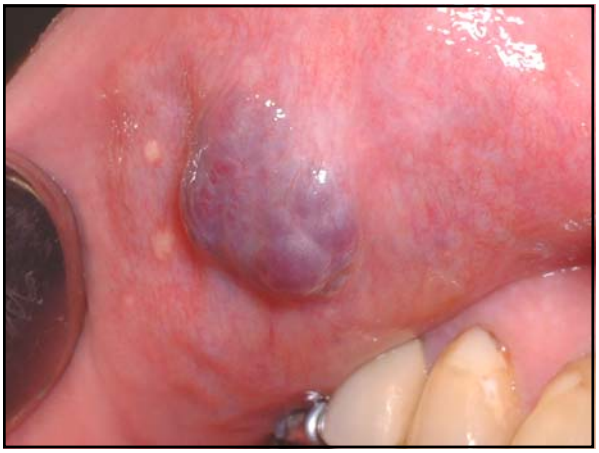
Malignant
- Sarcomas

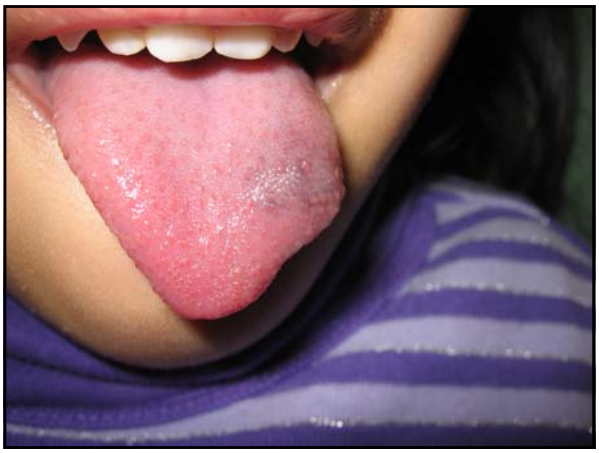
Hemangioma

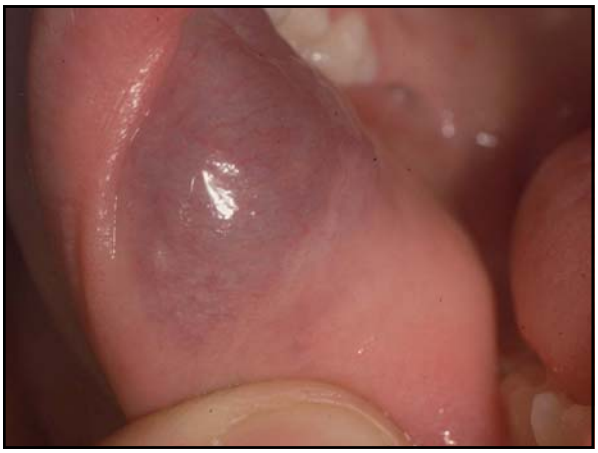
- Etiology: Benign proliferation of *vascular* endothelial cells
- Gender: F>M
- Age: Present since infancy but may not be clinically obvious
- Site:
  Any oral location; may be multiple
  Skin

Hemangioma

- Clinical features:
  Lobulated or nodular mass
  Red to purple
  ** Blanches with *diascopy*
- Clinical behavior:
  Present at birth, proliferates for 6-10 months, then involutes



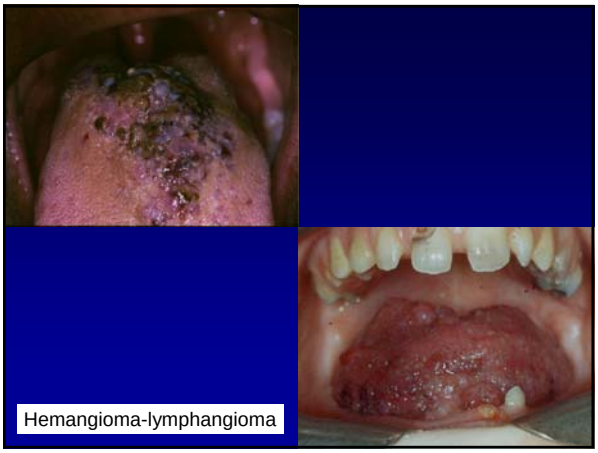




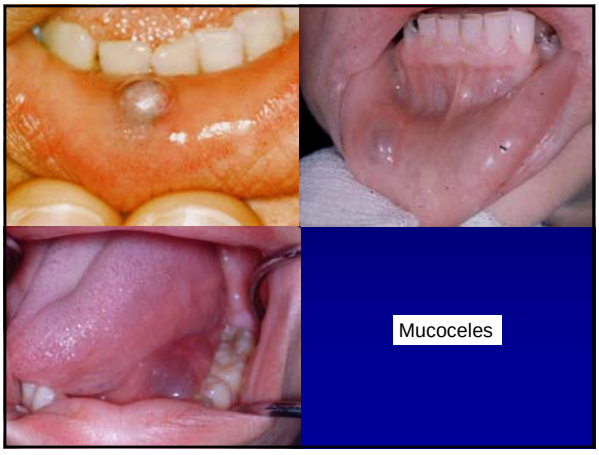
Hemangioma

- Differential diagnosis:
  1) Vascular malformation
     - present at birth; *persists throughout life*

     Varix – dilated vein
  2) Hematoma
  3) Lymphangioma
     - proliferation of *lymphatic* endothelial cells
     - often *combined* with hemangioma
  4) Pyogenic granuloma
  5) Mucocele; salivary gland tumor



Hemangioma-lymphangioma

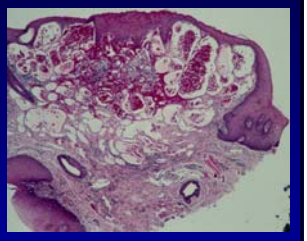


Mucoceles

Hemangioma

- Histology:
  - Numerous blood vessels
  - Capillary - small lumen

  Cavernous – dilated lumen



- Treatment: Periodic observation - as many involute with time

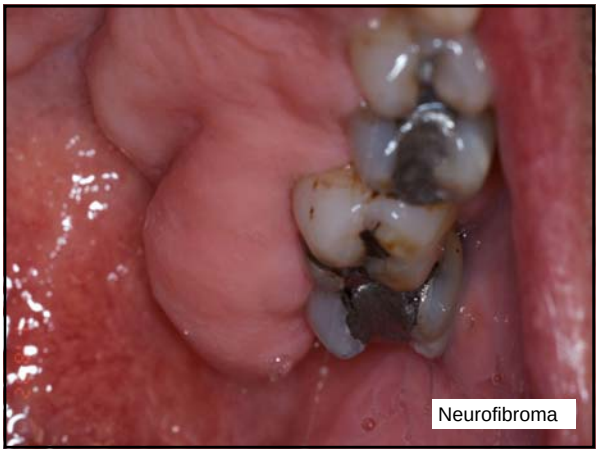
  Problematic lesions: steroids, sclerotherapy

Benign neural lesions

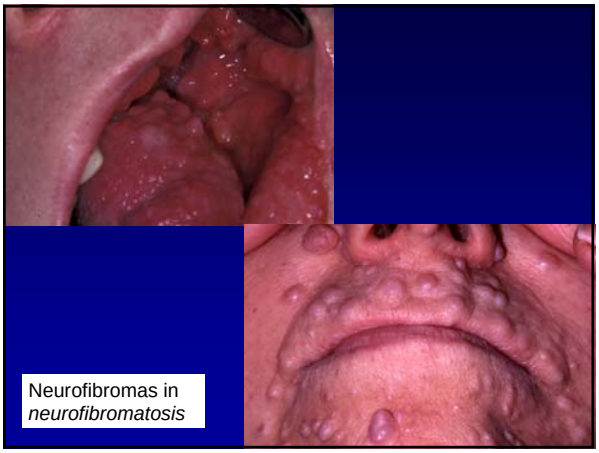
- Includes: 1) Neurofibroma
  - solitary
  - associated with *neurofibromatosis (NF)*
  2) Schwannoma
  3) Traumatic neuroma
  - after transection or damage to nerve
  - mental foramen area, tongue, lower lip
  4) Other neuromas
  a) Mucosal neuroma
  - associated with *multiple endocrine neoplasia III (MEN III)*
  b) Palisaded encapsulated neuroma

Benign neural lesions

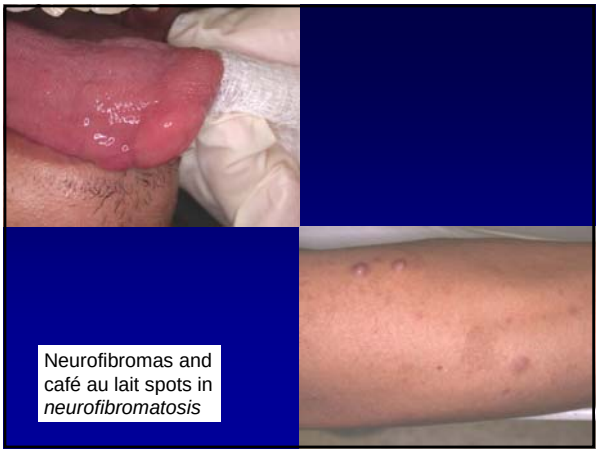
- Gender: No predilection
- Age: Young and middle-aged adults
- Site: Any; especially tongue
  Rarely can occur in jaw *(neurofibroma, schwannoma, traumatic neuroma)*
- Clinical features (soft tissue):
  Smooth-surfaced nodule or mass
  Pink
  Soft to firm
- Radiographic features (intraosseous):
  Well-defined radiolucency



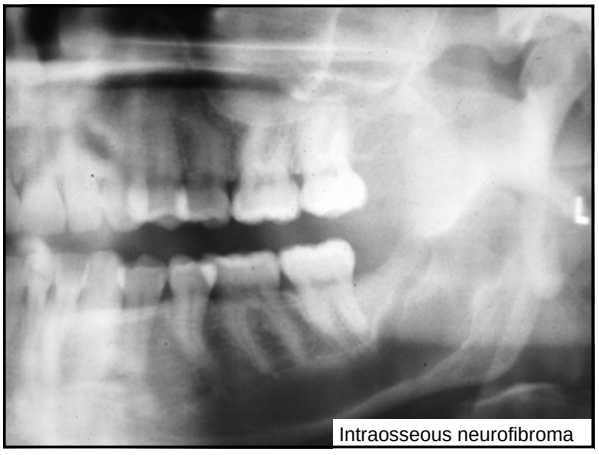
Neurofibroma



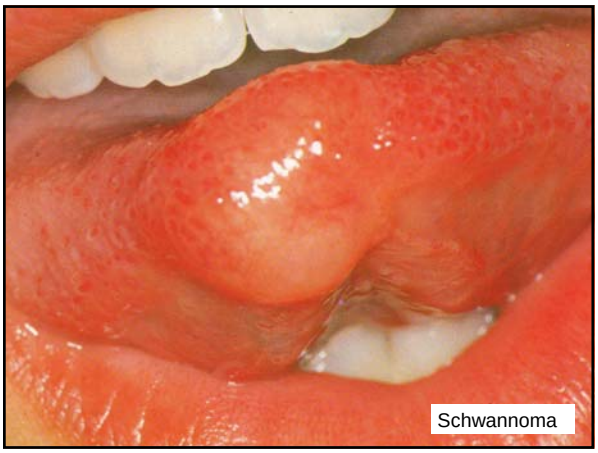
Neurofibromas in *neurofibromatosis*

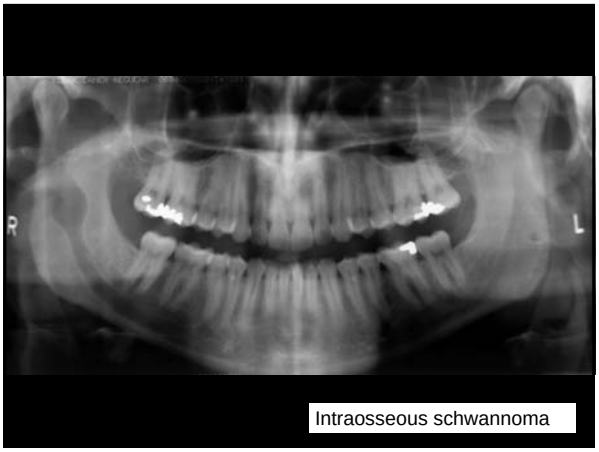


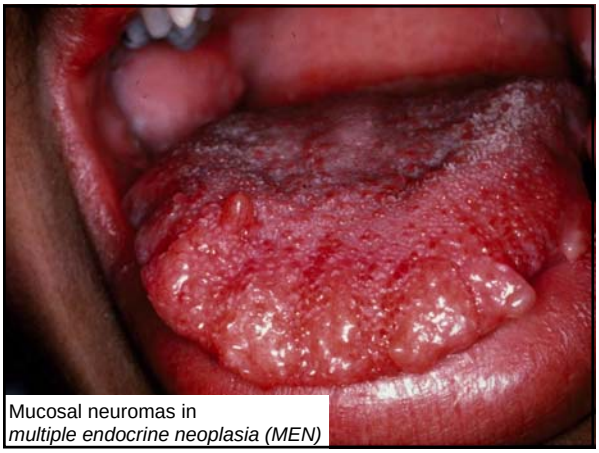
Neurofibromas and café au lait spots in *neurofibromatosis*

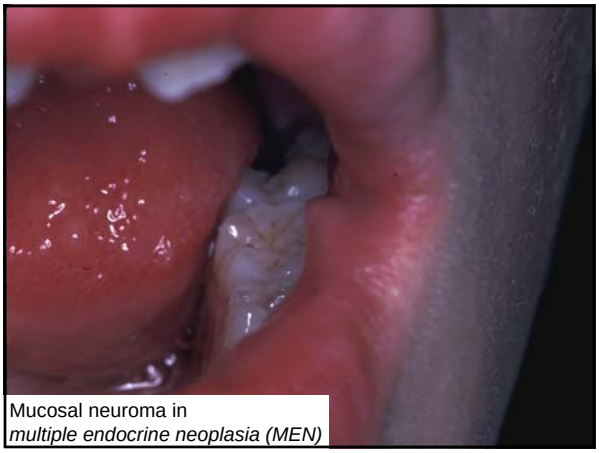


Intraosseous neurofibroma


Schwannoma


Intraosseous schwannoma


Mucosal neuromas in
multiple endocrine neoplasia (MEN)

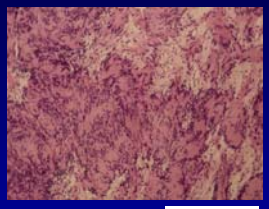

Mucosal neuroma in
multiple endocrine neoplasia (MEN)

Benign neural lesions

- Differential diagnosis:
  1) Fibroma
  2) Epulis fissuratum
  3) Lipoma; salivary gland lesions; vascular lesions
  4) Granular cell tumor – especially dorsum of tongue

Benign neural lesions

- Histology:
  - varies depending on type of lesion
  - cells with wavy nuclei
  - *schwannoma:* Antoni A and antoni B patterns



Schwannoma

- Treatment: Conservative surgical excision

Benign neural lesions

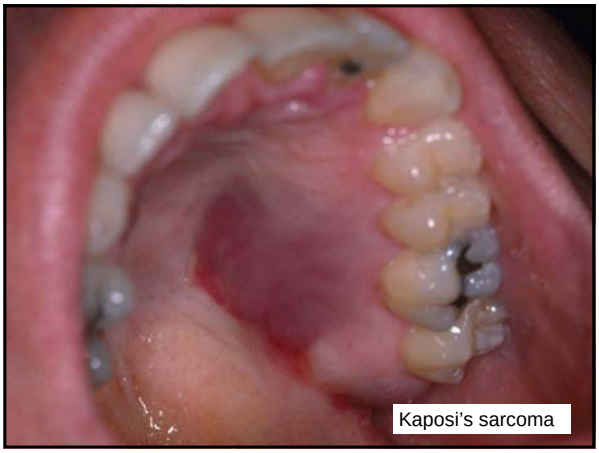
- If diagnosed as neurofibroma:
  - evaluate for *neurofibromatosis*, especially if multiple
- If diagnosed as mucosal neuroma:
  - evaluate for *multiple endocrine neoplasia (MEN) syndrome*

Sarcomas

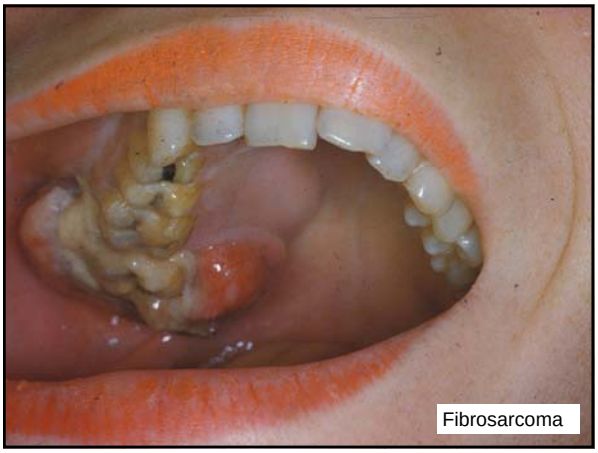
- Definition:
  Proliferation of *malignant* mesenchymal cells

Sarcomas

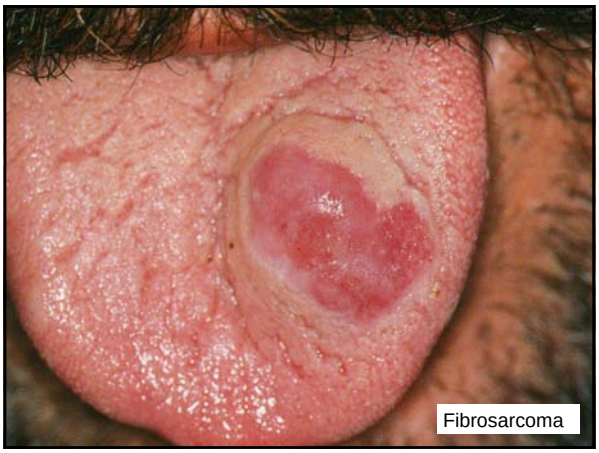
1) Fibroblasts = **fibrosarcoma**
2) Adipocytes = **liposarcoma**
3) Vascular endothelial cell
   = **Kaposi's sarcoma**
   = **angiosarcoma**
4) Peripheral nerve cells
   = **malignant peripheral nerve sheath tumor**
5) Striated muscle = **Rhabdomyosarcoma**
6) Smooth muscle = **Leiomyosarcoma**



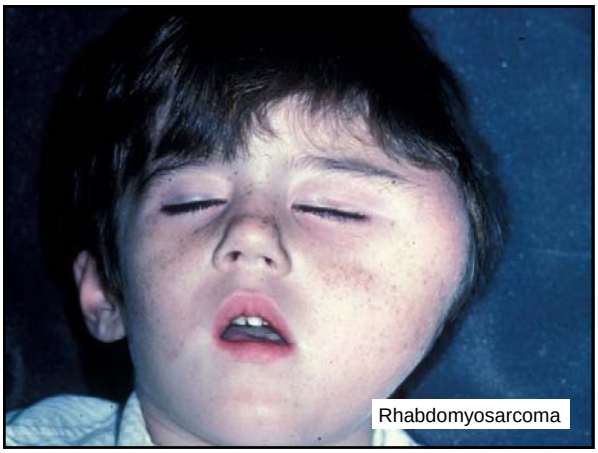
Kaposi's sarcoma



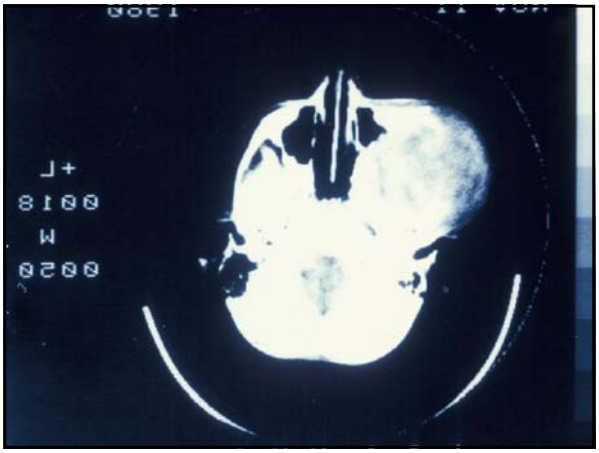
Fibrosarcoma



Fibrosarcoma



Rhabdomyosarcoma



Sarcomas

- Rare in oral cavity
- Points to remember:
  - History of *H&N radiation therapy* ➡ risk soft tissue and bone sarcoma
  - *Kaposi's sarcoma* ➡ HIV pt, transplant pt, immunosuppressed pt
  - *Malignant peripheral nerve sheath tumors* ➡ mostly in NF patients
  - *Rhabdomyosarcoma* ➡ orbit in children