

Kaposi Sarcoma

DR F W NANGOLE

SENIOR LECTURER DEPT OF SURGERY
PLASTIC SURGEON

- definition
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- treatment

definition

- Kaposi's sarcoma (KS) is an angio-proliferative spindle cell neoplasm of low grade malignancy, described by Moritz Kaposi in 1872. (Hungary)
- Caused by Human herpes virus type 8

- It originates almost only from lymphatic endothelium
- was considered rare until the discovery of the Acquired Immunodeficiency Syndrome (AIDS).

epidermiology

- Most common tumour in HIV infected individuals
- prior to hiv incidence was 5:100000 in south africa
- Onyango et al in Kenya showed it contributed to about 5 percent of all malignancies
- M:f ratio of 2:1
- 85 percent of cases occur in Africa

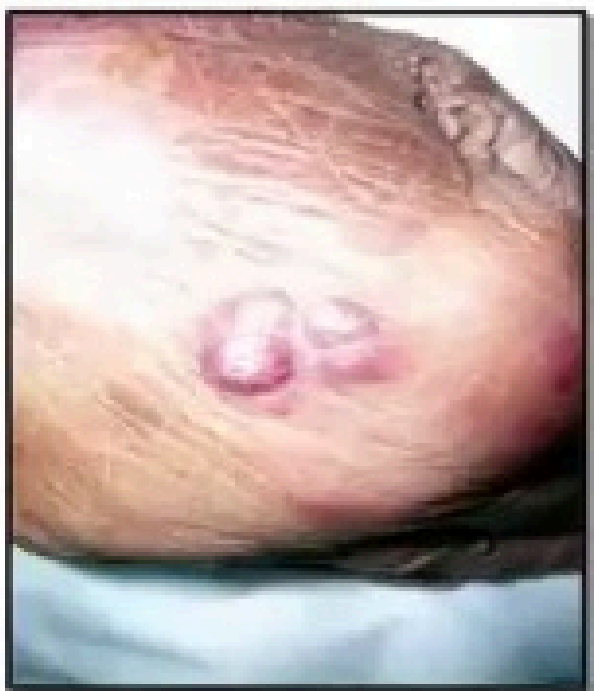
Pathology

- closely related with The HHV 8 virus
- The Virus is lymphatropic
- contains several genes related to the cellular proliferative , apoptosis and host response which are incooperated into the host cells
- Invests dividing CD45+ cells
- seem to be shade in body secretions including saliva and breast milk

Macroscopy

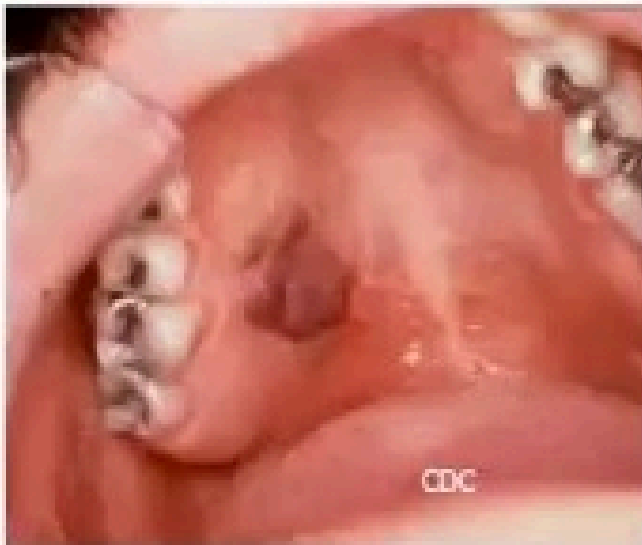
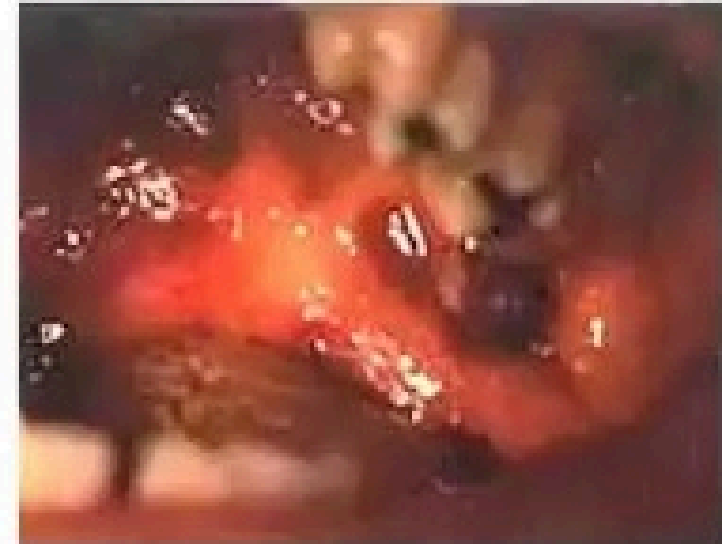
- characteristic lesions affect any part of the body except Brain
- most affected is the skin followed by the oral mucosa and the GIT
- lesions could be macular , Nodular or ulcerative
- Usually multiple







Kaposi's Sarcoma – palate



Microscopy

- The tumor reveals proliferation of spindle cells (that are mostly latently infected with KSHV)
- arranged in fascicles with interspersed vascular channels filled with red blood cells
- Tumors are distinguished by inflammatory infiltrates, extravasated red blood cells, hemosiderin-laden macrophages and leaky vasculature.

classification

- Endemic
- Classical type
- Epidermic type
- Iatrogenic / immunosuppresant types

Endemic type (equatorial African type)

divided into two

1. African cutaneous Kaposi sarcoma
2. African Lymphadenopathic KS

2. Endemic (African) KS :

The endemic KS is divided into two subtypes:

a. African Cutaneous KS

It develops in middle age adults (25 to 50 years old) from tropical Africa, can involve bones, causes legs to swell, and has only local aggressiveness.

b. African Lymphadenopathic KS

It develops mainly children from the “Bantu” ethnicity less than 10 years old. It is characterized by generalized lymphadenopathy and has an aggressive clinical behavior, killing within two years after the diagnosis.

Classic type

The classic (indolent) KS is seen in white older men of Southern Mediterranean or Eastern European heritage (over 60 years old in 90% of the cases)

- not related to HIV infection.

appears as reddish brown maculae and papules on the feet or hands, progressing to the legs (most common site) and arms. -
-10% of the cases there is involvement of viscera and mucosa.

It progresses over many years and is not often fatal

Epidemic Type

- Aids related Type of KS
- starts as small, non-itchy, slightly painful, patches with subsequent progression to plaques and nodules.
- Visceral lesions are frequent and gastrointestinal and pulmonary involvement
- It advances very rapidly, but is not always fatal.

- was observed in 30 to 40% of patients with Aids prior to HAART
- currently about 15 percent

Iatrogenic Kaposi sarcoma

- The KS associated with immunosuppressive states develops mainly in *solid organs transplant receivers*, those with neoplastic diseases and those with *autoimmune conditions* under immunosuppressive treatment

Management

1 History and physical examination

- S and S of HiV / Aids disease / Transplants etc
- Biopsy , incisional biopsy to confirm the diagnosis
- OGD/Colonoscopy for GIT
- Bronchoscopy for the respiratory system

Treatment

- Chemotherapeutic agents , vincristine , bleomycin Doxyrubicin
- Radiotherapy
- symptomatic management , compression therapy

Staging Systems for KS

There is no officially accepted system for staging Kaposi sarcoma. However Mitsuyasu classification system is the most simple and clinically acceptable system which comprises 4 stages:

Stage I: Localized nodular Kaposi sarcoma in elderly men

Stage II: Localized, invasive, and aggressive Kaposi sarcoma (mostly seen in Africa)

Stage III: Disseminated mucocutaneous Kaposi sarcoma in African children and patients who are homosexual

Stage IV: Stage III with visceral involvement

Prognosis of KS

- correlates with the degree of immunosuppression and older age among classic KS patients
- African KS appearing in young children is the most lethal
- Epidemic or AIDS-related KS is most commonly treatable and not fatal.