Kaposi's sarcoma: The clinical spectrum and management Challenges

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KS Spectra (Classification)

- Classic KS
- African endemic KS with the polymorphic features
- Ks in iatrogenically immunocompromised patient
- AIDS-related (epidemic) KS
 - *Histology generally the same



Moricz Kaposi (Kaposvar, 1837 -1902)

Idiopathisches multiples Pigmentsarkom der Haut. (Arch Derm Syph 1872; 4: 265-72)

morphological sub variants

- Nodular
- Nodular-florid
- Plaque
- Diffuse infiltrative
- Lymhangiomatous (Carvenous)
- Lymphadenopathic











HIV Epidemic: Initial remarks

"In June of 1981 we saw a young gay man with the most devastating immune deficiency we had ever seen. We did not know what that was and hoped we don't ever see another case like it again' Dr. Samuel Broader, USA

Epidemic KS: First scientific facts

Friedman-Kien et al. Kaposi's sarcoma and pneumocystis pneumonia among homosexual men- New York and California MMWR 1981; 30: 305-8

Friedman-Kien et al. Disseminated KS-like sarcoma syndrome in young homosexual man J Am Acad Dermatol 1981; 5: 468-70

Epidemic KS: What is it?

- Profound immune suppression
- Homosexuals in Europe
- Heterosexuals in Africa
- Not as common in drug addicts!

Epidemic KS: Clinico-morphology

- Generalized
- Oval lesions- along skin cleavage
- Mucous membranes
- May have facial oedema
- Visceral involvement not uncommon
- Lung involvement.

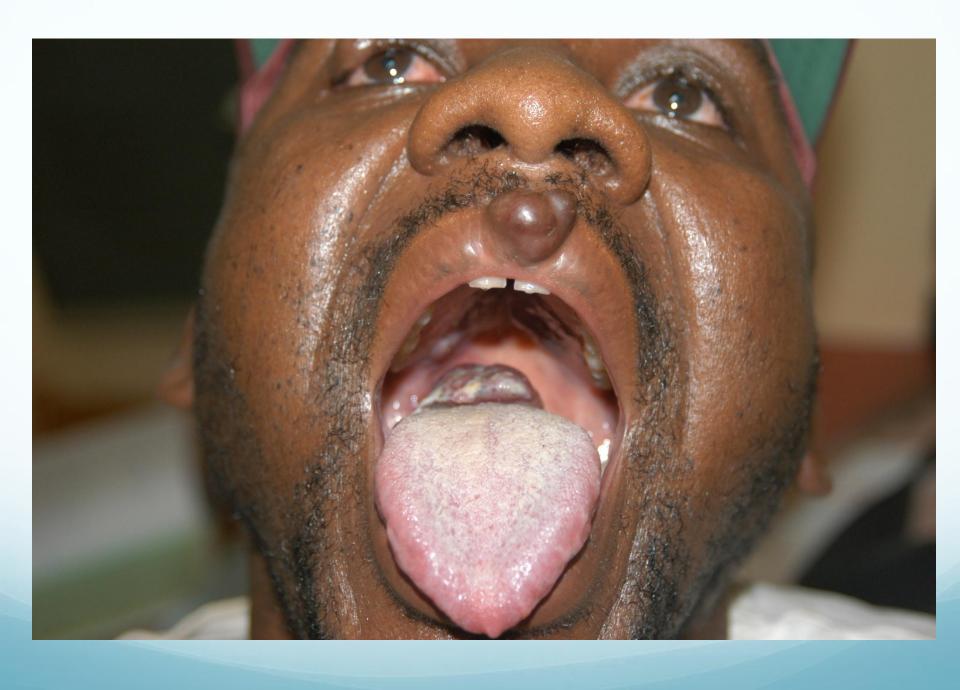






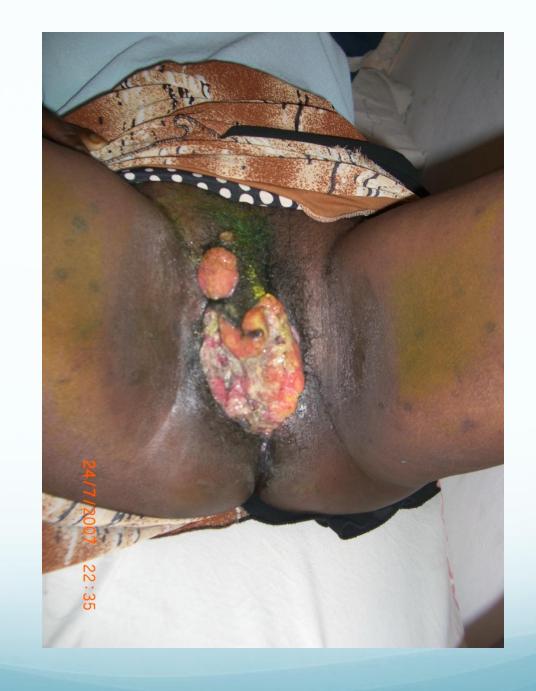
















Epidemic KS: associated Risk factors

- Multiple sexual partners in Africa
- Particular sexual activities (anal, oral etc.)
- Associated episodes of STIs
- Unprotected sex
- Viral infections (HSV and Hepatitis B)

II - Epidemic KS: Associations?

- HIV-1 encoded Tat protein (Short term growth factor for the EKS cells)
- HIV 1 Tat protein activates and promotes HHV-8 entry into the endothelial cells
- HHV-8 induces pro-angiogenic factors and other cytokines eg. IL-6, IL-12 etc
- Some activated T- cell macrophages induces potent growth factor (Oncostatin M)

KS Spectrum at the RDTC

Eur J Dermatol 2006; (16): 667-82

- 77 Histologically confirmed KS studied
- 66 Epidemic KS (M:F = 1.5 : 1)
- 11 Endemic KS (All males)
- Both: CD4 < 500
- Both: High HHV-8 seroprevalence (95% in Epidemic and 100% Endemic group)
- High risk to develop KS if individual is both HIV+ and HHV-8+ (OR = 10.6, 95% CI)

KS: Management options

- Observations with HAART era
- Staging issue: with KS?
- Other clinical considerations: experience?
- What are the possible outcomes?
- Treat or no Treatment?
- Topical or Systemic approach?

KS: Local treatment

- Small, localized, very painful, cosmetic etc
- Cryotherapy
- Radiotherapy
- Surgical (excision or with CO₂ Laser)

I/L Injections with Cytotoxics

KS: Systemic treatment

- Extensive, with internal lesions
- Localized but inaccessible or life threatening
- Vinblastine or vincristine
- Bleomycin
- Doxorubicin or daunorubicin
- Pacitaxel or Docetaxel





EKS: summing up observations at RDTC

- Wide spread clinical dissemination with the epidemic type
- Epidemic: More rapid course
- Epidemic: Oral mucosa and craniofacial
- No Histological differences!
- Management options:

KS Spectra: More Questions than Answers

- We need to know more about its polymorphism and the Racial diversity!
- We need to know more about its varying Biological aggressiveness!
- We need to know more about the pathogenesis and the viral relationships

THANK YOU!!!