

Nicolas DUPIN, MD

Skin diseases indicating HIV disease

I do not have any relevant
relationships with industry.



Skin and HIV

- I consider that skin disease may reveal HIV infection all along the natural history of HIV
 - During primary
 - During early stages
 - During late stages
- Skin disorders observed at early stages are not the same than those observed at late stages of HIV
- However because some patients may be diagnosed at late stages, skin disorders associated with late stages may reveal HIV
- Dermatologists should be aware that HIV may hide behind common skin disorders





The 80's



Early, 2000...

and now 

Skin and HIV

- 80-90% of patients with HIV have dermatologic disease
- HIV -> a defect in cell-mediated immunity which predisposes to certain infections (bacterial, fungal, mycobacterial, viral), many of which have skin findings
- HIV-positive patients are also at increased risk for neoplasms, inflammatory dermatoses, and drug reactions
- Dermatologic disease common to the general population (e.g., seborrheic dermatitis) often has an increased prevalence or severity in HIV-positive individuals



Skin and HIV

- Skin lesions may be the first sign of HIV infection
 - Ask about risk factors for HIV infection when a patient < 50 yrs-old presents with herpes zoster (shingles)
 - Suspicion for HIV infection should be raised when a patient presents with multiple skin diseases (e.g., severe seborrheic dermatitis and thrush)
- Some skin diseases are so characteristic of the immunosuppression of HIV-infection that their presence warrants HIV testing
 - Oral hairy leukoplakia, bacillary angiomatosis, and Kaposi sarcoma
- Typically, antiretroviral therapy improves skin conditions that result from immunodeficiency



Skin manifestations according to CD4 count

- Skin disease associated with any CD4 Cell Count:
 - Herpes simplex virus
 - Varicella zoster virus
 - Staphylococcus aureus
 - Syphilis
 - Scabies
 - Drug Reactions
 - Lymphoma
- More commonly associated with CD4 counts < 200
 - Infection: Epstein-Barr virus (oral hairy leukoplakia), candidosis, bacillary angiomatosis, molluscum contagiosum, histoplasmosis, coccidiomycosis...
 - Inflammatory: Psoriasis, seborrheic dermatitis, Acquired ichthyosis, Atopic dermatitis, xerosis
 - Neoplasm: Kaposi sarcoma
 - Other: Eosinophilic folliculitis, pruritus, prurigo...



Skin and HIV

- Primary HIV infection
- Common Skin disorders may reveal HIV
- Skin may reveal rare systemic infections associated with late stages of HIV
- Typical (early stages) and atypical (late stages) viral diseases may reveal HIV
- What is the challenge for dermatologist for HIV in 2020 ?



Skin and HIV

- Primary HIV infection

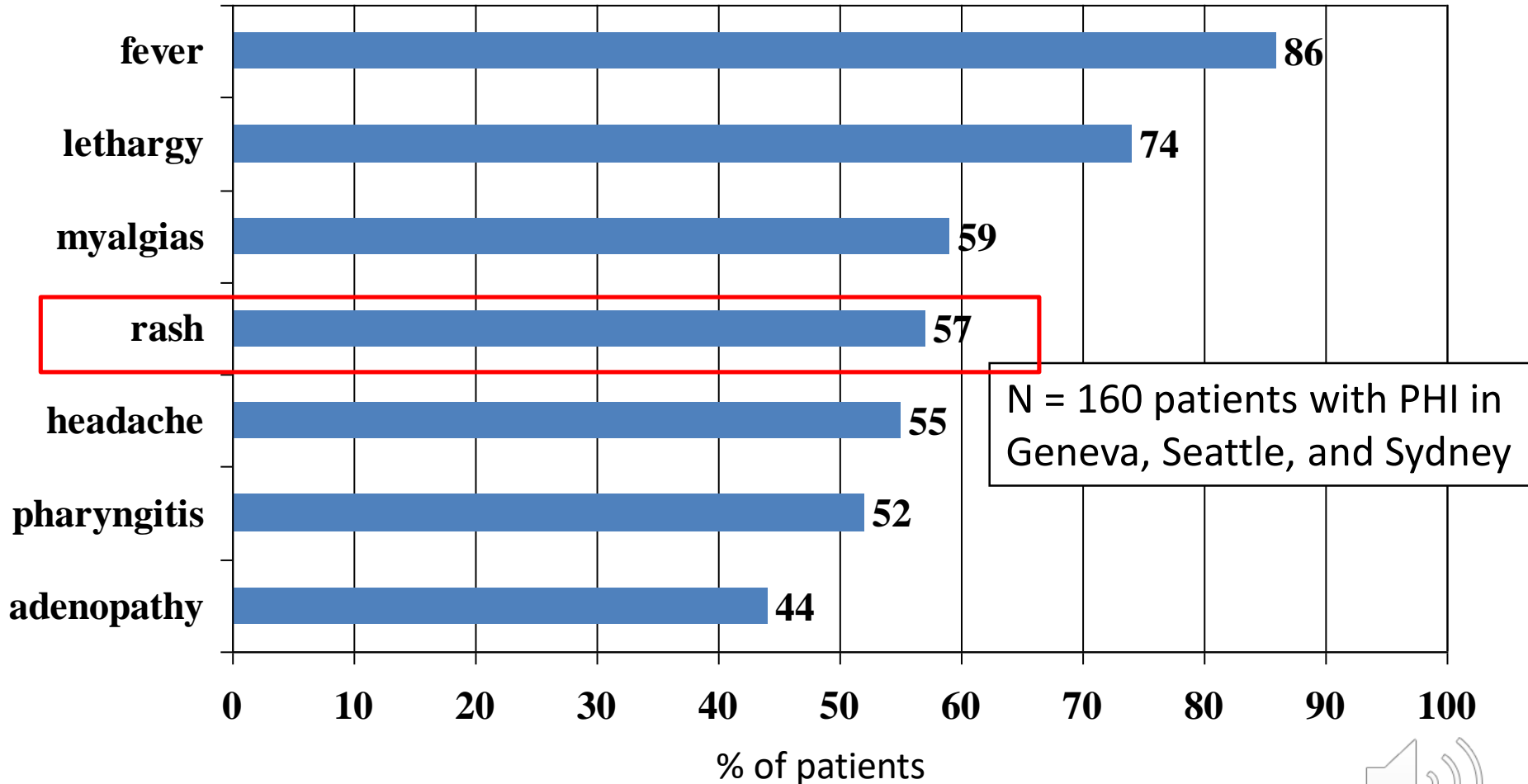


Primary HIV Infection: Signs & Symptoms

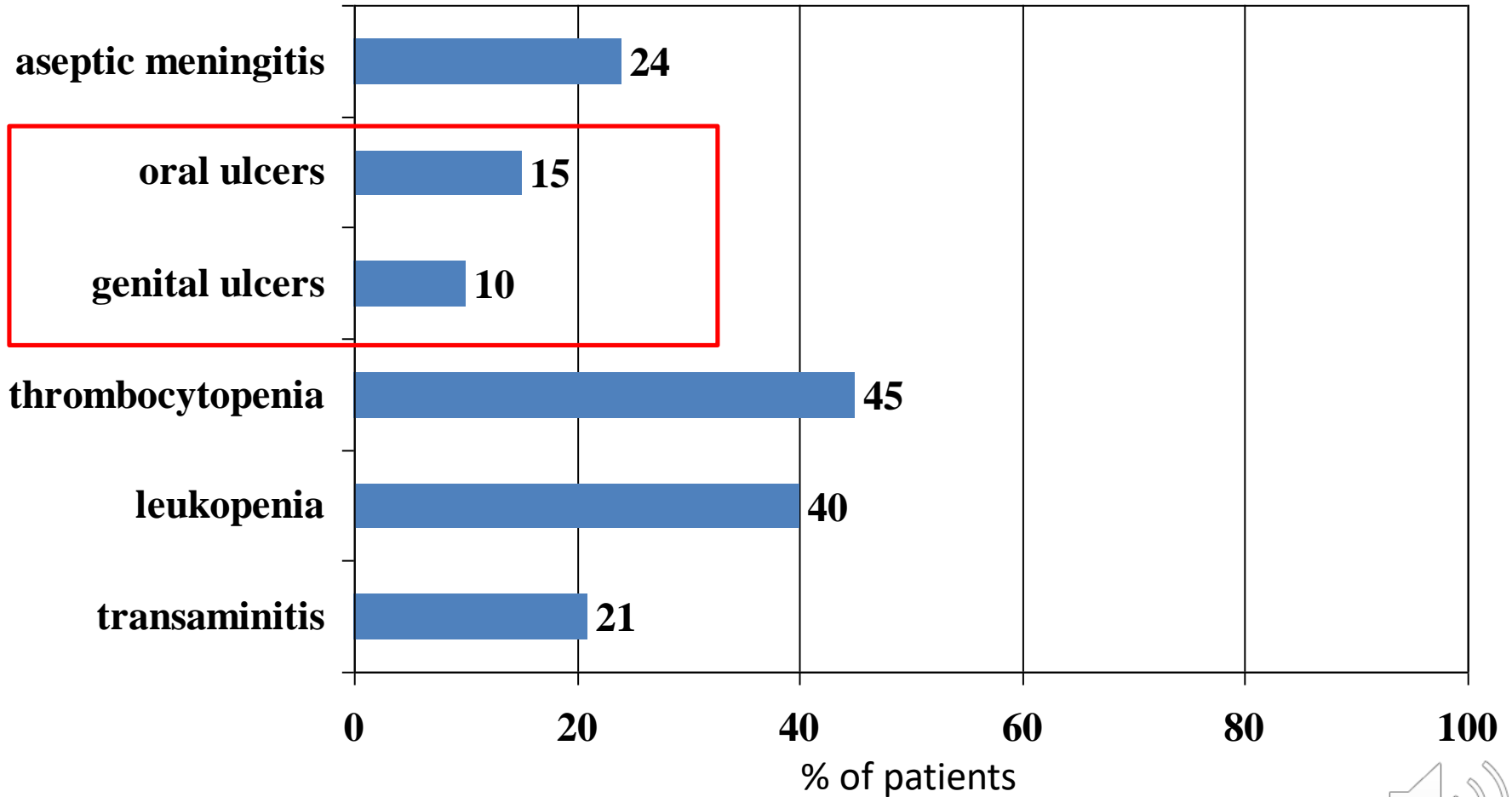
- 40-90% of patients will be symptomatic
- A mononucleosis-like illness of non-specific signs and symptoms
- Signs and symptoms typically begin 1-4 weeks post-exposure
- High index of suspicion is critical



Primary HIV Infection: Common Signs & Symptoms



Primary HIV Infection: Other Signs & Symptoms









Primary HIV infection



Skin and HIV

- Common Skin disorders may reveal HIV





Psoriasis and HIV

- Psoriasis is a common disease in the general population and in patients with HIV
- When patients have pre-existing psoriasis, the severity of their psoriasis may worsen in the course of their HIV infection
- Psoriatic arthritis is more common and severe in HIV-positive individuals
- Similar to the general population, HIV-positive individuals with psoriasis can have multiple coexisting patterns at the same time or over time
 - Plaque Psoriasis
 - Inverse Psoriasis*
 - Pustular psoriasis
 - Erythrodermic psoriasis*
 - Guttate psoriasis⁺



Psoriasis and HIV, treatment

- Similar to all patients with psoriasis, the general approach to treating HIV-associated psoriasis is to tailor therapy according to the patient's disease severity and preference:
 - Mild to moderate disease: topical treatment (steroids, retinoids, vitamin D analogs)
 - Moderate to severe disease: phototherapy, oral retinoids, or both may be used as second-line treatment
 - Refractory, severe disease: refer to a HIV specialist and dermatologist for consideration for immunotherapy



Other common skin disorder that may reveal HIV



- Seborrheic dermatitis
 - Aphthosis/aphtous ulcers
 - Acne
 - Rosacea
 - Xerosis, atopic dermatitis
 - Oral candidosis...
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- All these common disorders are increased in HIV and patients should be tested for HIV
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- Dermatological consultation should be the time to propose HIV blood test...

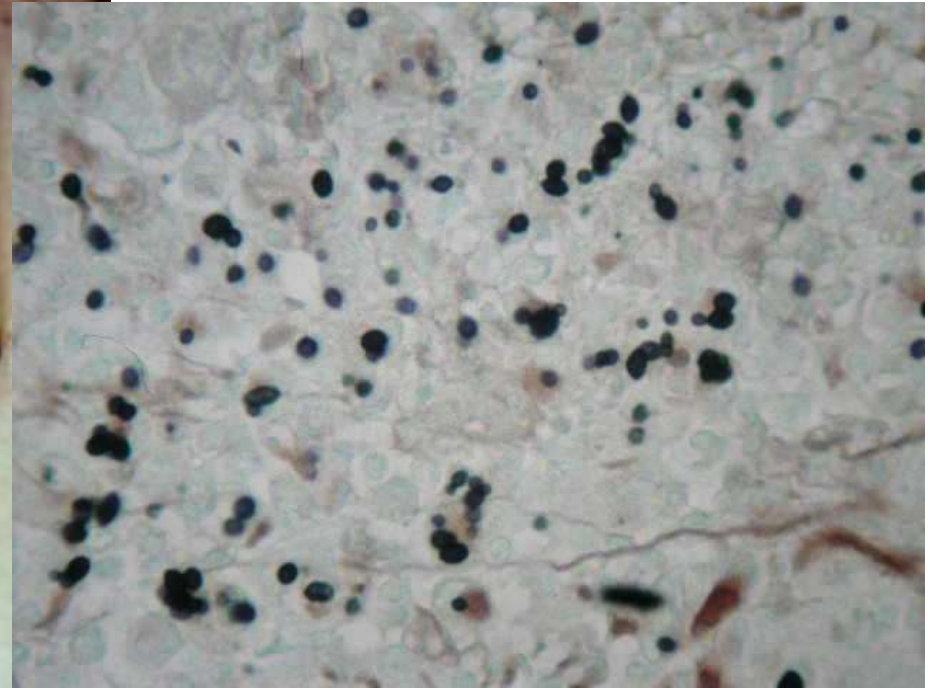


Skin and HIV

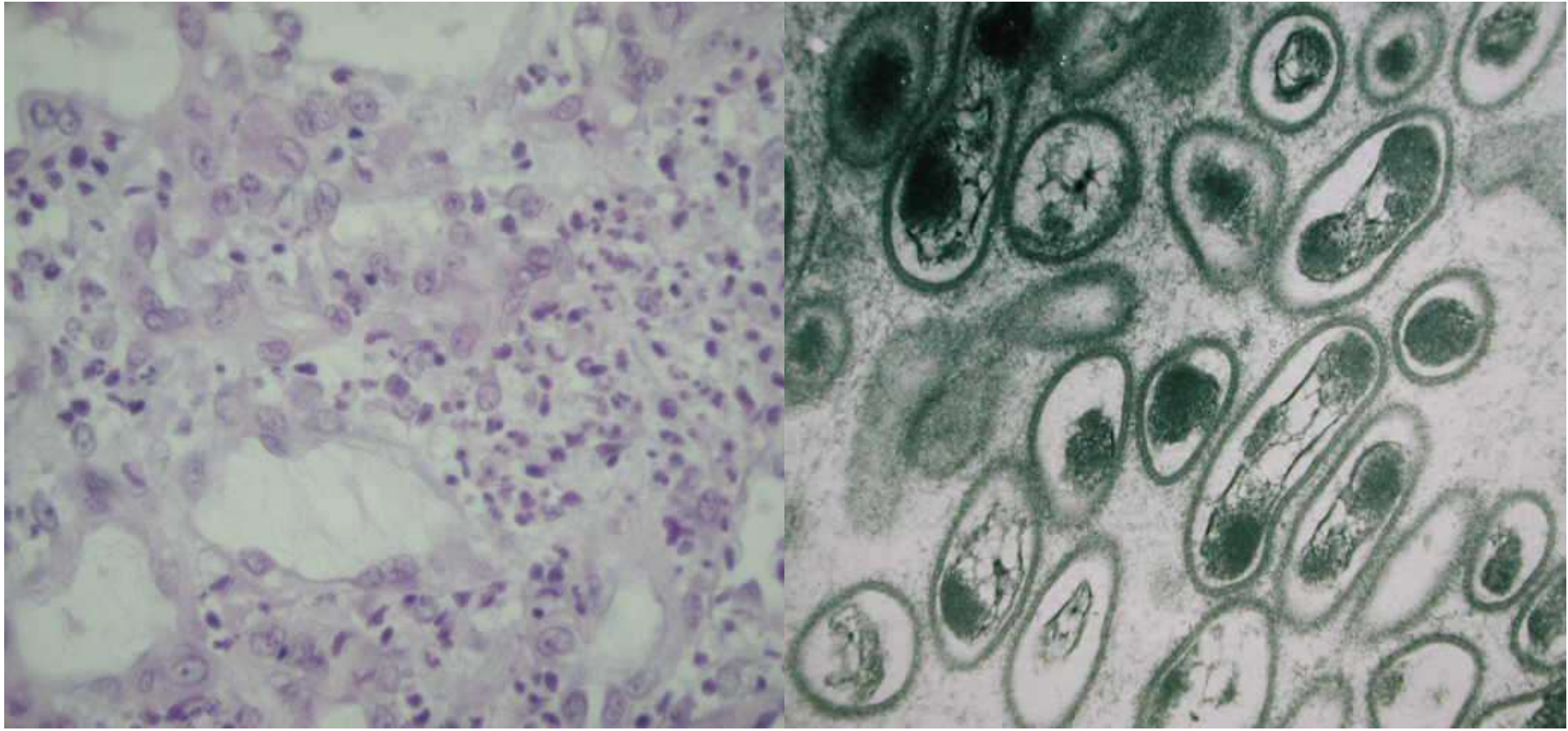
- Skin may reveal rare systemic infections associated with late stages of HIV



Histoplasmosis



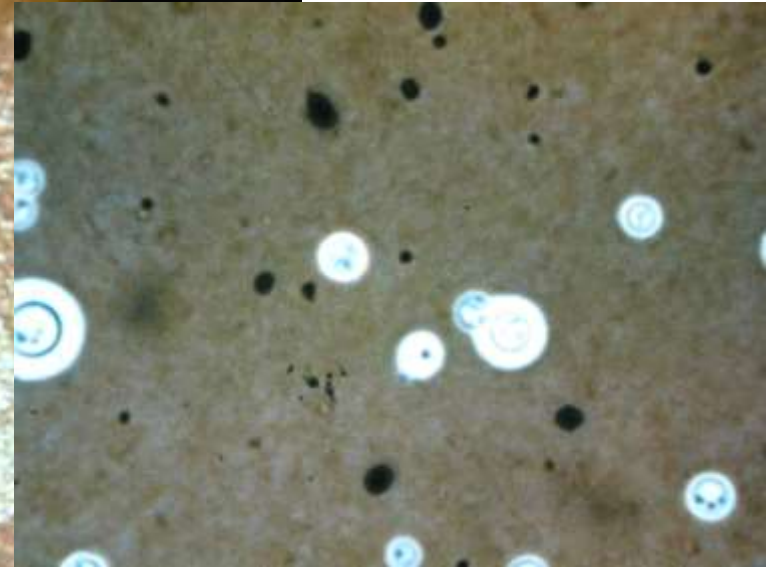




Bacillary angiomatosis after macrolides treatment



cryptococcosis



Skin and HIV

- Typical (early stages) and atypical (late stages) viral diseases may reveal HIV



Herpes zoster



These patients should be tested for HIV



External condyloma-HPV6/11



This patient should be tested for HIV



External condyloma-HPV6/11



These patients should be tested for HIV



Oral condyloma-HPV6



Buschke-Lowenstein-HPV11



This patient should be tested for HIV



Epidermoid carcinoma-HPV16



This patient should be tested for HIV



Bowenoid papulosis-HPV16



This patient should be tested for HIV



Epidermodysplasia Verruciformis

Despite effective HAART, HIV-infected patients with EV require a prolonged and careful follow-up to detect mucosal HPV-related diseases, lymphoproliferative disorders, and skin cancers.

Jabobelli et al Arch Dermatol 2001



These patients should be tested for HIV



Oral hairy leukoplakia-EBV



CD4 ⁺ cells/mm ³	Hairy Leukoplakia	
	n	%
<50	41	(28.3)
50-99	19	(18.8)
100-200	23	(18.5)
>200	40	(13.7)
p*	.000	

*Linear trend χ^2 .



Molluscum contagiosum



This patient should be tested for HIV



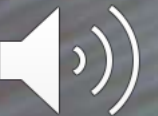
Molluscum contagiosum



This patient should be tested for HIV



Herpes may be typical



Herpes can lead to extensive erosions



This patient should be tested for HIV



Herpes can lead to extensive erosions

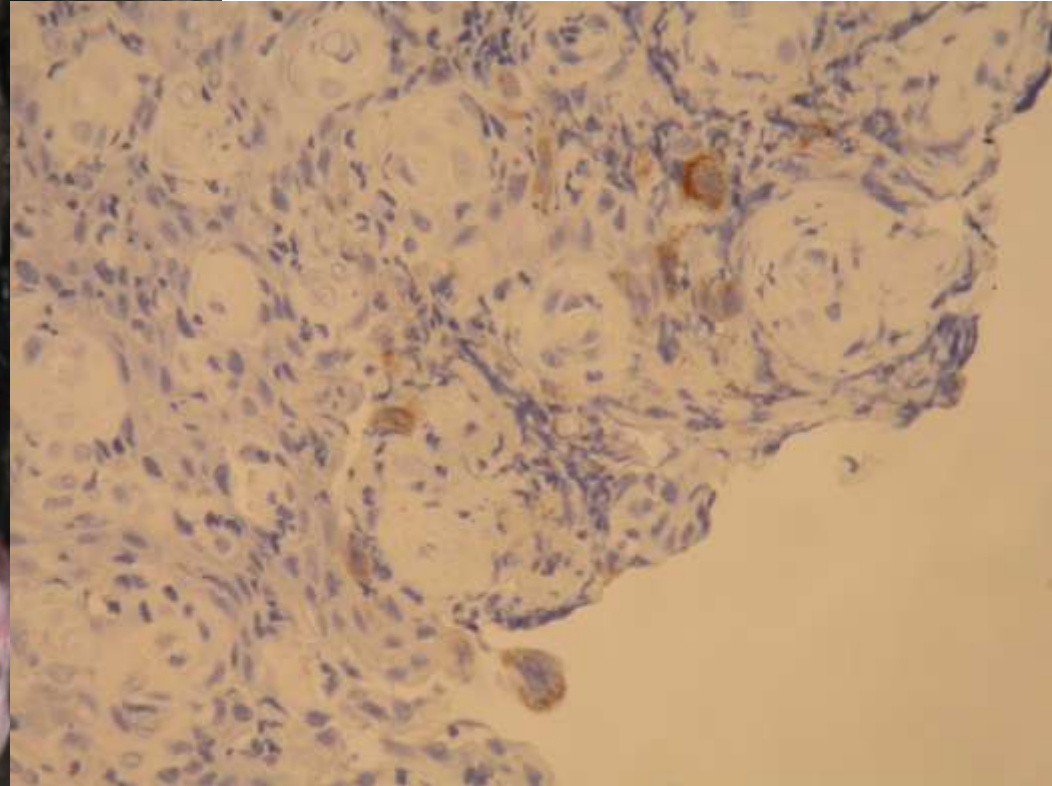




This patient should be tested for HIV



Pseudotumoral herpes



This patient should be tested for HIV



The new pictures since 10 years in western countries...



April 2013



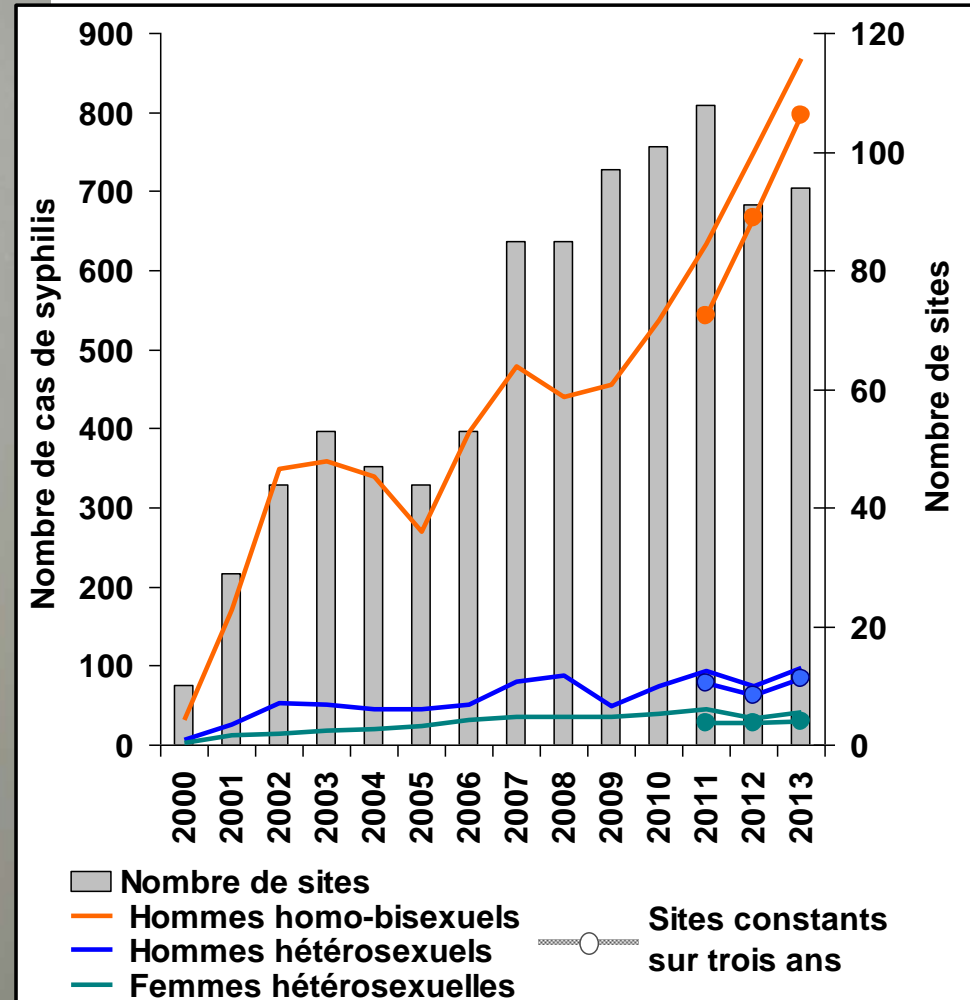
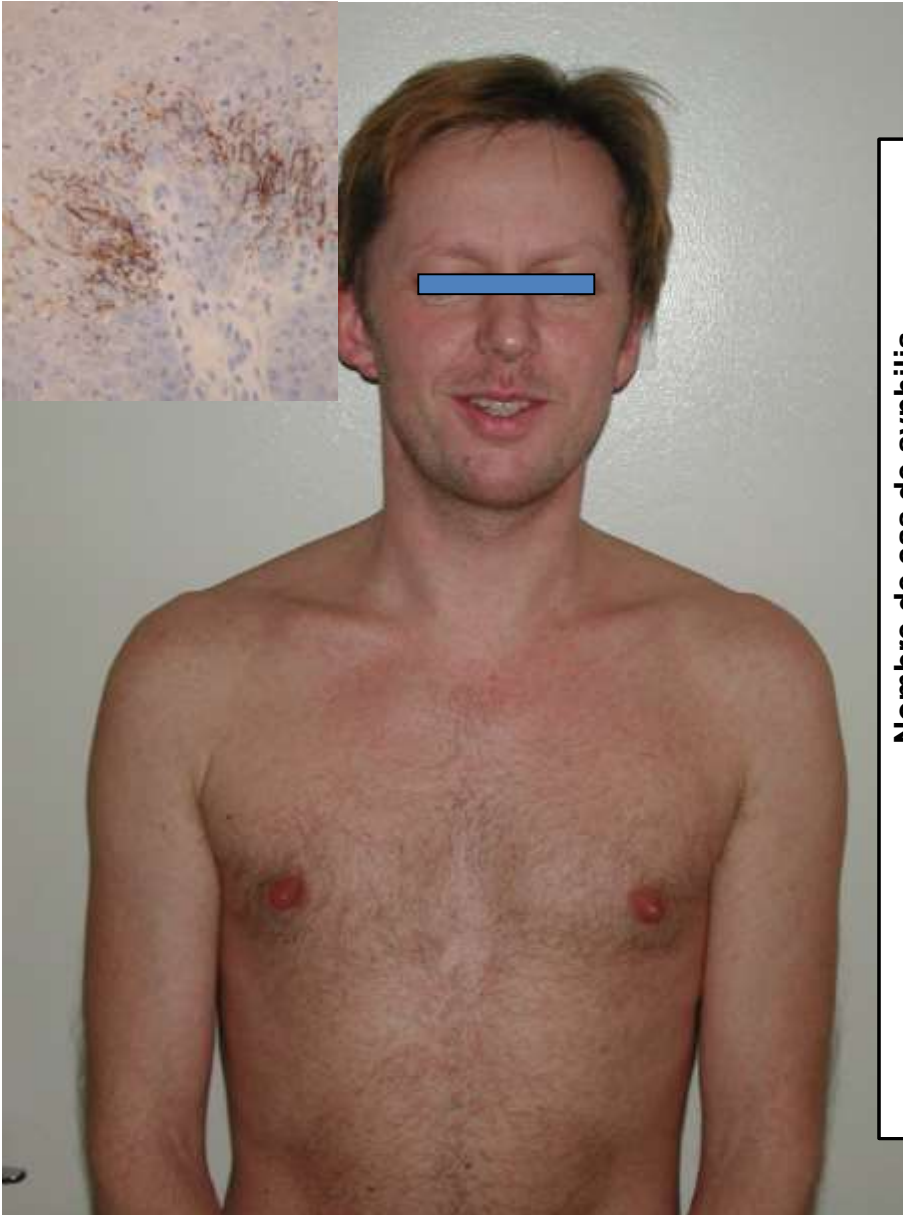
December 2014



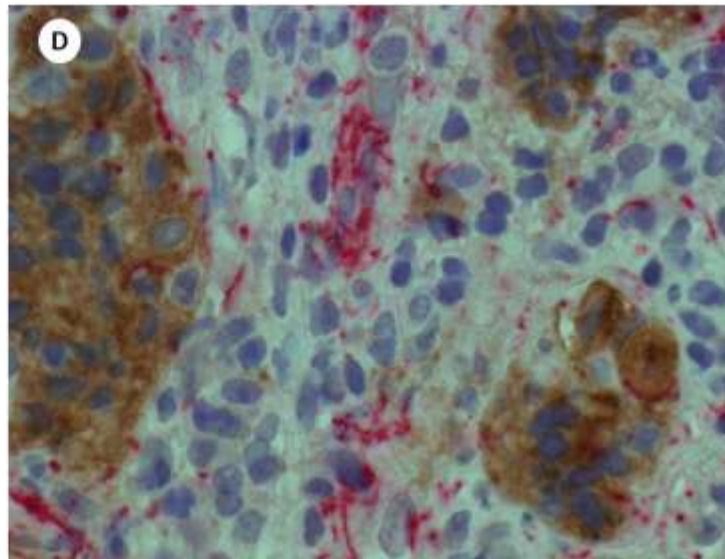
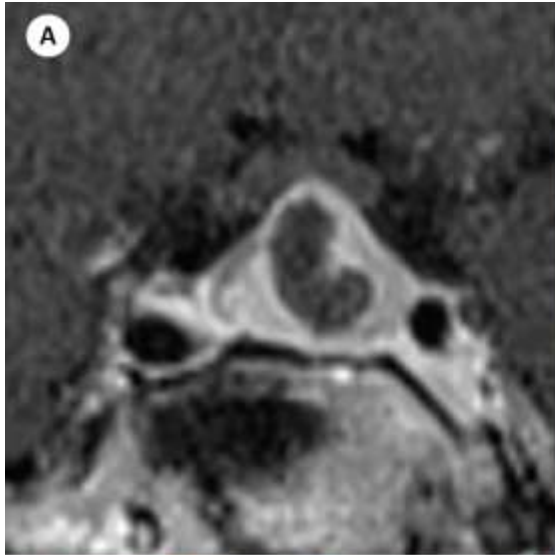
Syphilis, the great pretender is back since 2000 !



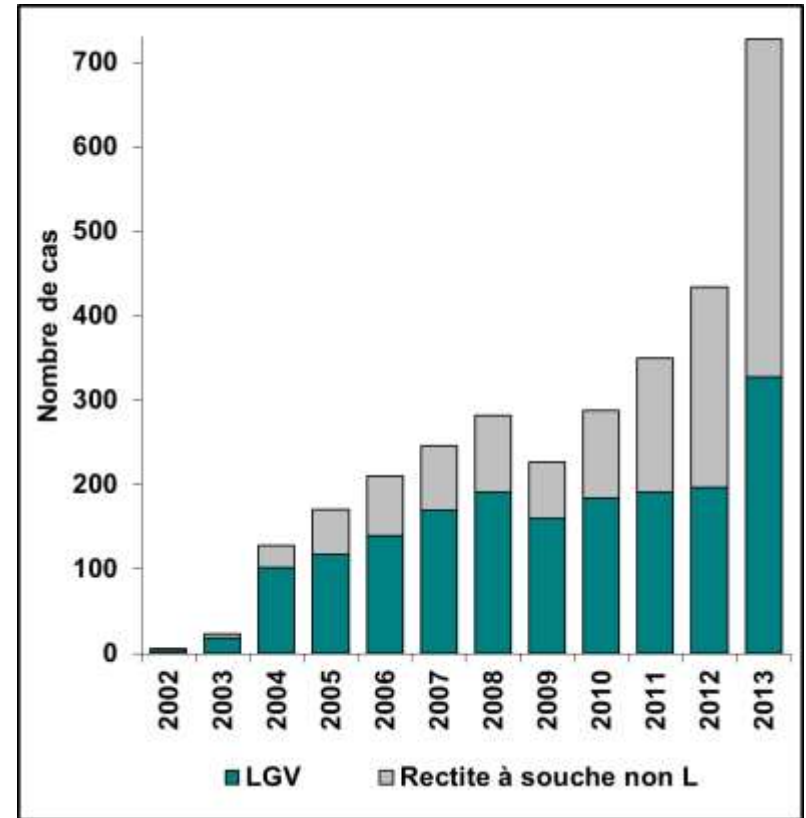
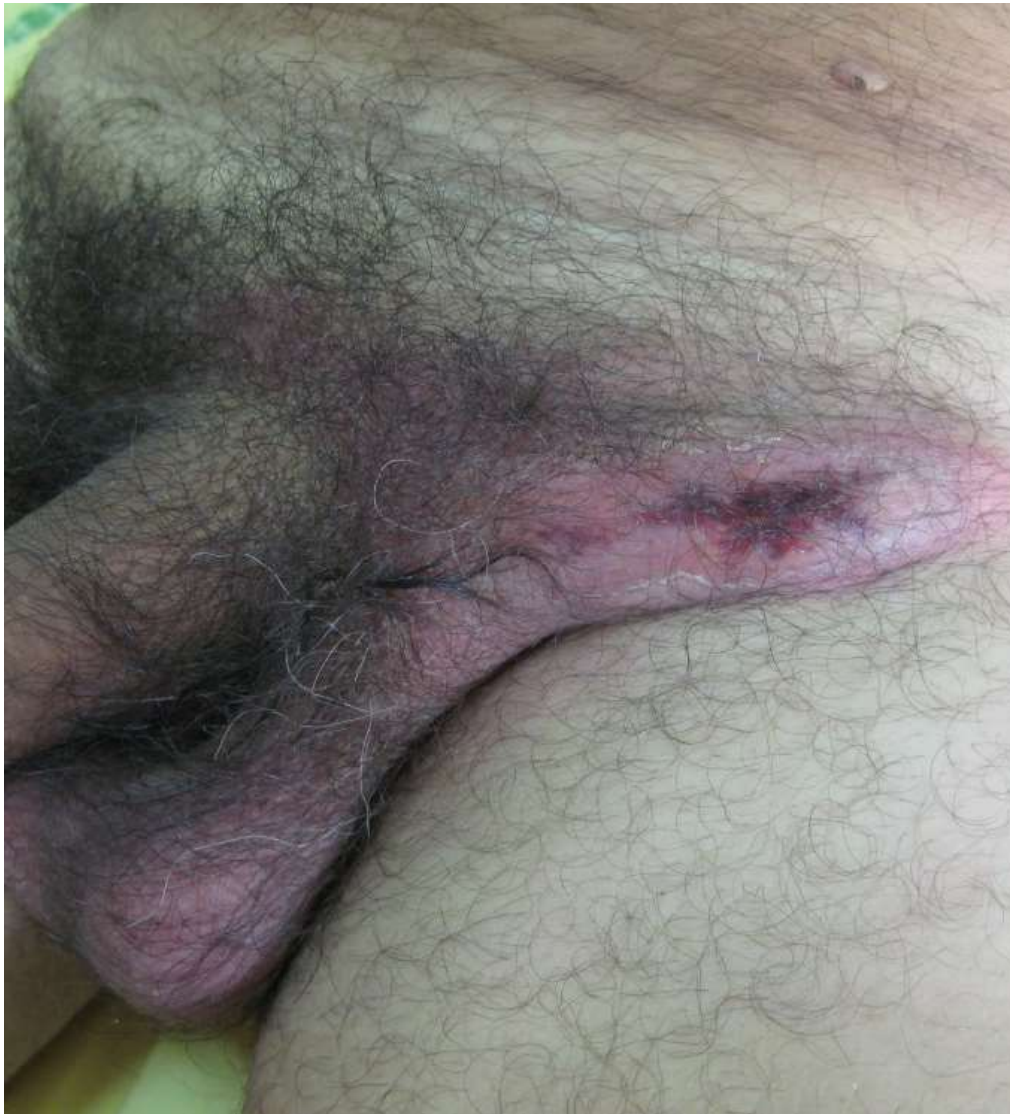
40 to 50% HIV+



Syphilis can mimick all disease



Lymphogranuloma venereum



> 80% HIV+



To a skin point of view...

Kaposi



lipoatrophy



syphilis



Take home messages

- skin disease may reveal HIV infection all along the natural history of HIV
- Skin may reveal primary infection which is underdiagnosed and a main source of HIV transmission
- HIV predisposes to certain infections (bacterial, fungal, mycobacterial, viral), many of which have skin findings
- HIV-positive patients are also at increased risk for neoplasms, inflammatory dermatoses, and drug reactions
- The presentation of viral skin disorders may be influenced by the intensity of immunosuppression
- Skin doctors should prompt patients to be test for HIV
- Skin consultation may not so rarely represent the good time to propose HIV blood test

