



# Cutaneous Manifestations of HIV/AIDS

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# Kheth 'Impilo



| STAGE 1                                | STAGE 2                               | STAGE 3                       | STAGE 4                      |
|--|---------------------------------------|-------------------------------|------------------------------|
| Asymptomatic                           | Moderate unexpected weight loss       | Unexpected severe weight loss | HIV wasting syndrome         |
| Persistent generalized lymphadenopathy | Recurrent respiratory tract infection | Persistent oral candidiasis   | Pneumocystic pneumonia       |
|  | Herpes Zoster                         | Pulmonary tuberculosis        | Karposi sarcoma              |
|  | Angular Cheilitis                     |                               | Extra pulmonary tuberculosis |
|  | Fungal nail infection                 |                               |                              |

### Primary HIV infection

This stage lasts for a few weeks and its often accompanied by a short flu-like illness. In up to about 20% of people the HIV symptoms are serious but the diagnosis is frequently missed.

children (aged 5 and over) the progression is often delayed and the disease is often diagnosed and the CD4 count is less than 200 cells/mm<sup>3</sup> or a CD4 percentage less than 15%. WHO has developed a staging system for HIV disease based on clinical symptoms, which may be used to guide medical decision making. This was

**Stage 1**

- Asymptomatic
- Persistent Generalized Lymphadenopathy (PGL)

**Stage 2**

- Hepatosplenomegaly
- Papular pruritic eruptions, Seborrhoeic dermatitis
- Extensive human papilloma virus infection , Molluscum contagiosum
- Herpes zoster
- Fungal nail infections
- Parotid enlargement
- Recurrent oral ulcerations, Lineal gingival erythema (LGE), Angular cheilitis
- Recurrent or chronic RTI's (otitis media, otorrhoea, sinusitis)

**Stage 3**

**Conditions where a presumptive diagnosis can be made on the basis of clinical signs or simple investigations**

- Moderate unexplained malnutrition(between the 3<sup>rd</sup> percentile and 60% of expected weight)
- Unexplained persistent diarrhoea (14 days or more )
- Unexplained persistent fever (intermittent or constant, for longer than one month)
- Oral candidiasis (outside neonatal period )
- Oral hairy leukoplakia, Acute necrotizing ulcerative gingivitis/periodontitis
- Severe recurrent presumed bacterial pneumonia
- Pulmonary TB

**Conditions where confirmatory diagnostic testing is necessary**

- Chronic HIV-associated lung disease, including brochiectasis
- Lymphoid interstitial pneumonitis (LIP)
- Unexplained anaemia (<8g/dl), and or neutropenia (<1000/mm<sup>3</sup>) and or thrombocytopenia (<50 000/ mm<sup>3</sup>) for more than one month

**Stage 4**

**Conditions where a presumptive diagnosis can be made on the basis of clinical signs or simple investigations**

- Unexplained severe wasting or severe malnutrition
- Pneumocystis pneumonia
- Extrapulmonary TB
- Oesophageal candidiasis
- Recurrent severe presumed bacterial infections (excluding pneumonia)
- Chronic herpes simplex infection; (orolabial or cutaneous of more than 1 month duration)
- Kaposi's sarcoma
- CNS toxoplasmosis (outside the neonatal period)
- HIV-associated encephalopathy

**Conditions where confirmatory diagnostic testing is necessary**

- CMV infection (CMV retinitis or infection of organs other than liver, spleen or lymph nodes; onset at age one month or more)
- Extrapulmonary cryptococcosis including meningitis
- Any disseminated endemic mycosis
- Cryptosporidiosis, Isosporiasis
- Disseminated non-tuberculous mycobacteria infection
- Candida of trachea, bronchi or lungs
- Visceral herpes simplex infection
- Acquired HIV-associated rectal fistula
- Cerebral or B cell non-Hodgkin lymphoma
- Progressive multifocal leukoencephalopathy (PML)
- HIV-associated cardiomyopathy or nephropathy

# Factors playing a role in HIV incidence and prevalence in Southern Africa

## Medical factors

1. Genital mucosa trauma,
2. Male circumcision
3. Other sexually transmitted infections
4. Viral load of infected partner

## Individual behaviour

1. Drug and alcohol usage/abuse
2. Lack of condom usage
3. High risk sexual partners, i.e. sex workers
4. High turnover rate of sexual partners
5. Ignorance

## Societal factors

1. Access to health care
2. Poverty and wealth inequality
3. Population migration
4. Gender inequality

# HIV and the SKIN

01

Worsening of  
Certain skin  
conditions

02

HIV  
associated  
skin diseases

03

HIV related  
skin  
infections

04

HIV/AIDS  
related drug  
reactions

Worsening  
of Certain  
skin  
conditions



























# HIV associated Skin diseases













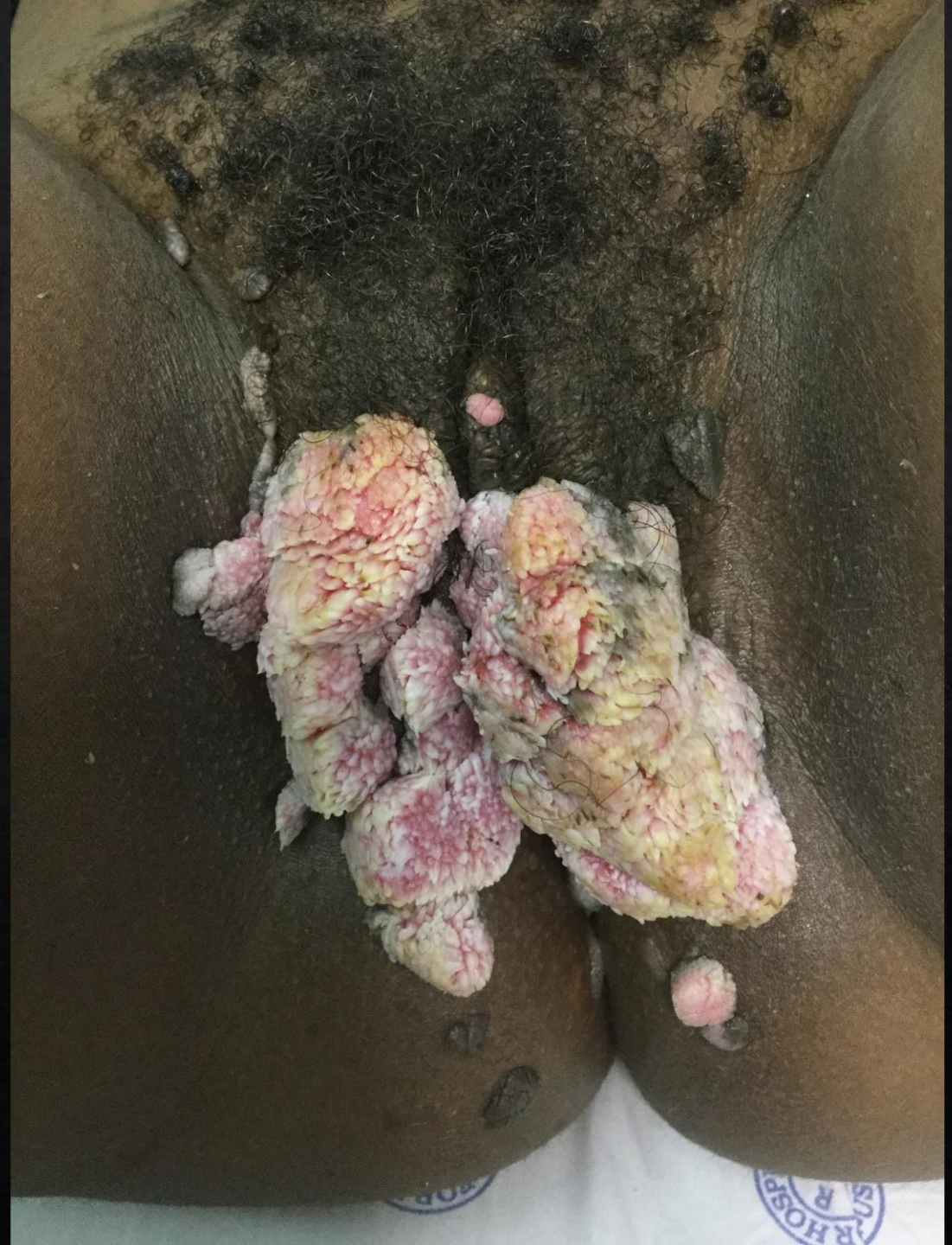


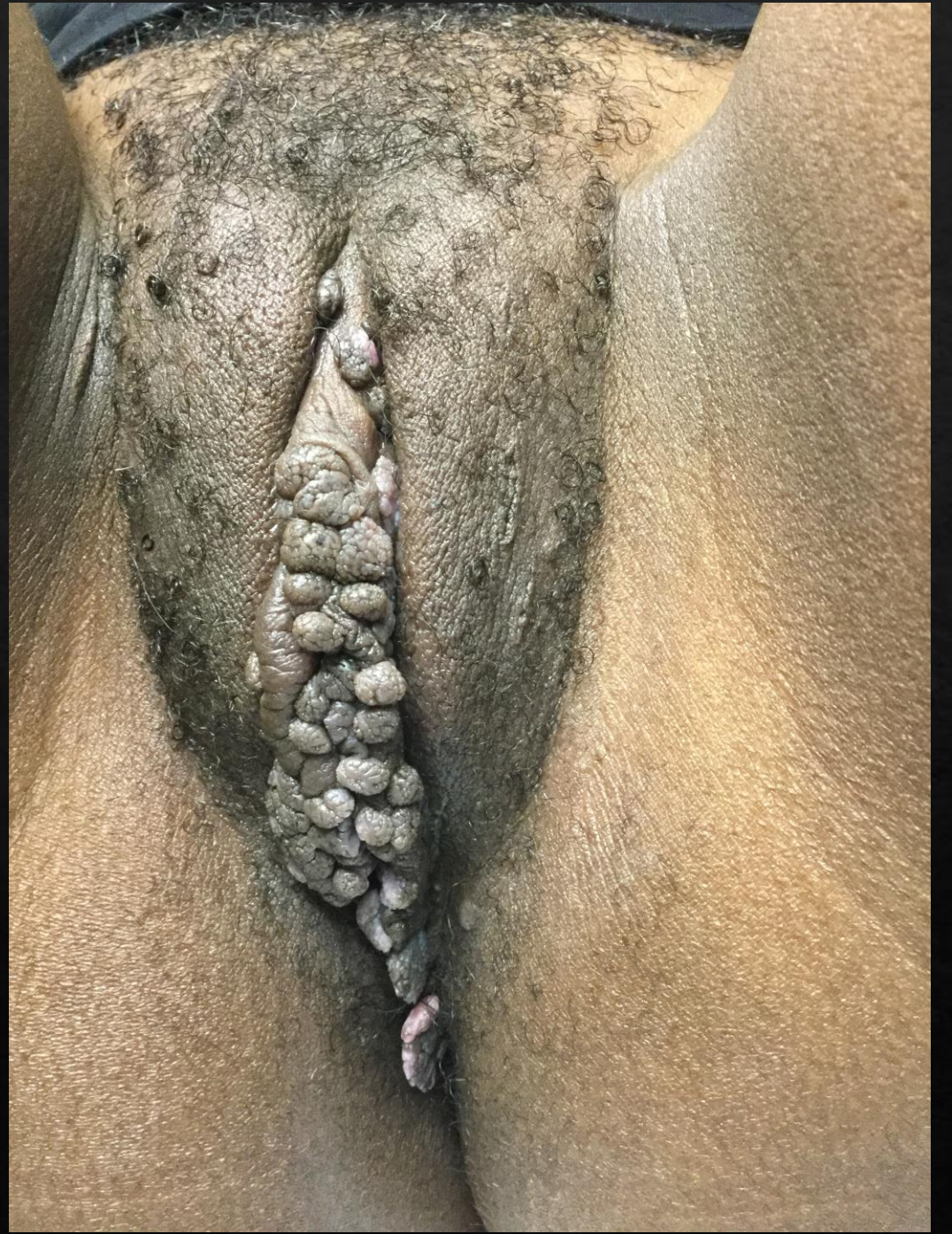






HIV  
related  
skin  
infections

















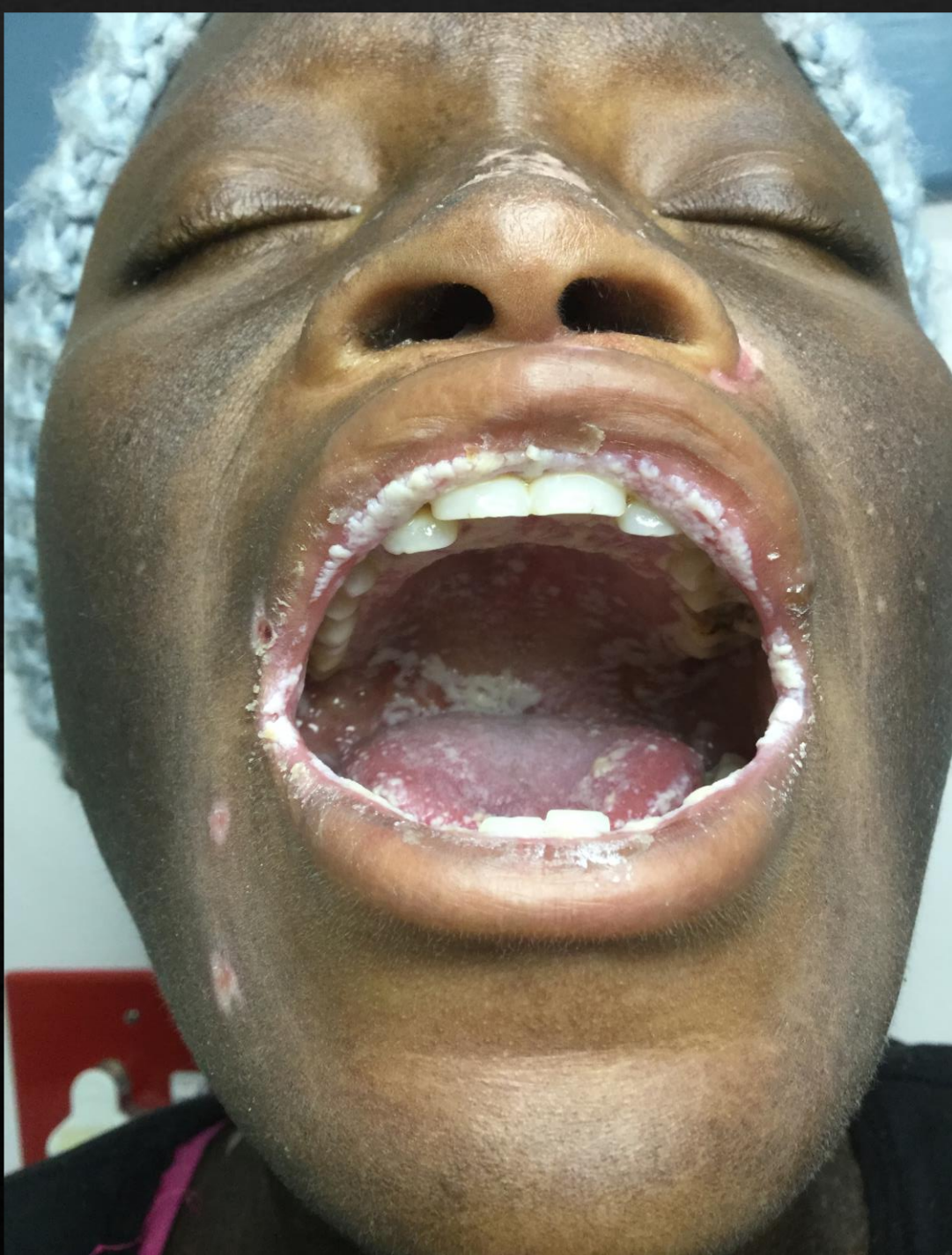














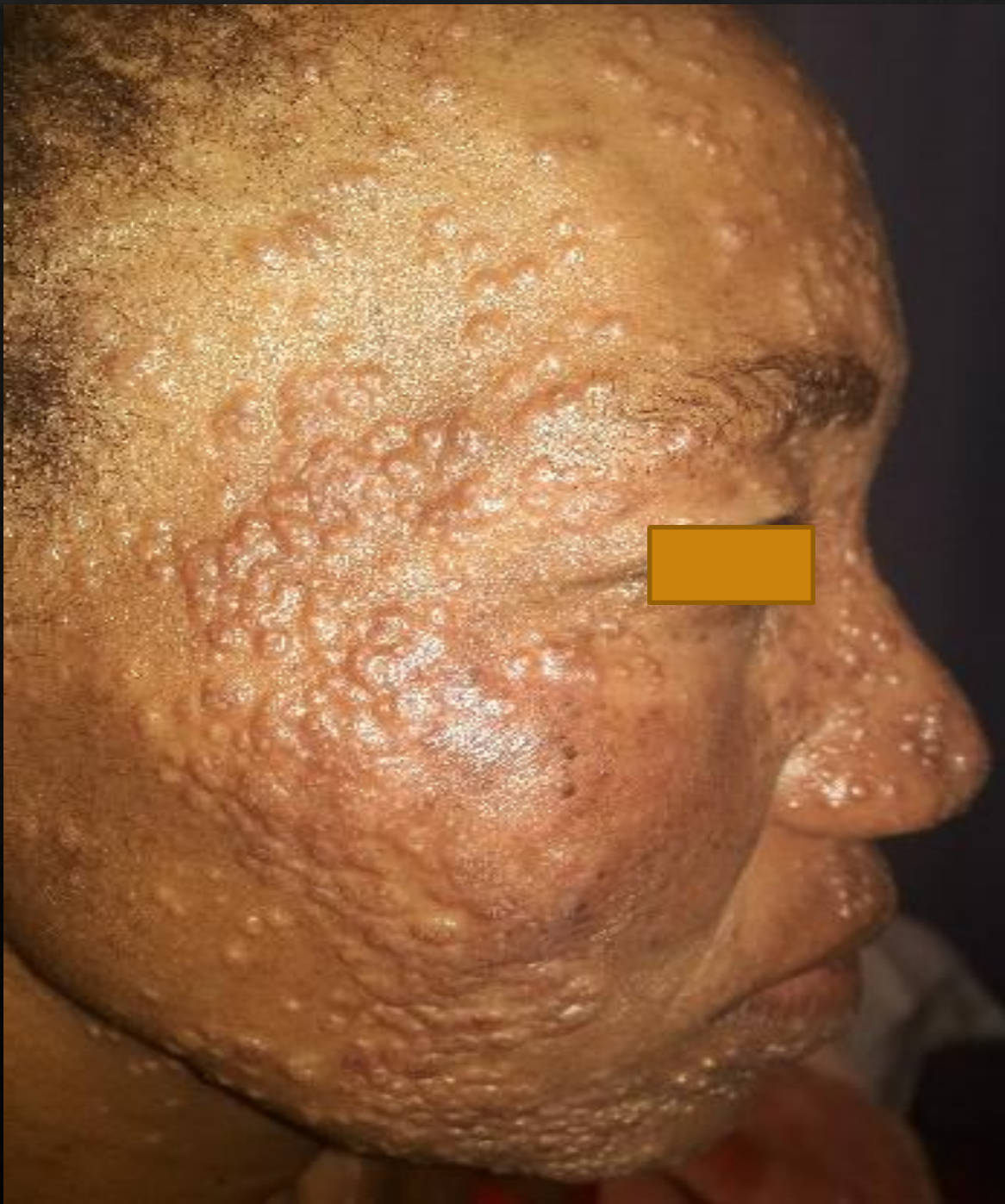
























HIV/AIDS  
related drug  
reactions







|  |   |
|--|---|
| <b>Mechanisms of cutaneous drug reaction</b><br><b>Immunological mechanism</b> | <ul style="list-style-type: none"> <li>❖ IgE-dependent drug reactions</li> <li>❖ Cytotoxic/drug-induced reactions</li> <li>❖ Immune-complex dependent drug reactions</li> <li>❖ Cell-mediated reactions</li> </ul>        |
| <b>Non-immunologic mechanisms</b>  | <ul style="list-style-type: none"> <li>❖ Overdose</li> <li>❖ Delayed toxicity</li> <li>❖ Drug-drug interactions</li> <li>❖ Drug side effects</li> <li>❖ Exacerbation of disease</li> <li>❖ Cumulative toxicity</li> </ul> |
| <b>Idiosyncratic reaction with immune elements</b>                             | <ul style="list-style-type: none"> <li>❖ TEN/drug hypersensitivity reaction</li> <li>❖ Drug reactions in a HIV setting</li> </ul>   |









# HIV and the SKIN

01

Worsening  
of some skin  
conditions

02

HIV  
associated  
skin diseases

03

HIV related  
skin  
infections

04

HIV/AIDS  
related drug  
reactions

# Summary

- ◇ Being the largest organ of the body, the skin often plays a vital role in not only aiding in the diagnosis of HIV/AIDS, but also as an indicator of possible treatment failure, poor treatment compliance and as a sensitive indicator of clinical regression in patients already on treatment.
- ◇ There are many other HIV/AIDS related skin conditions, **particularly infections**
- ◇ Try to be systematic in your approach
- ◇ Remember other STI's
- ◇ In some instances, the presenting skin condition, is reflective of the underlying HIV infection.

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95%



**Aware**

*of HIV  
diagnosis*

**of which**

95%



**Treated**

*for HIV*

**of which**

95%



**Virally  
suppressed**

*virus not  
detectable*



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**STOP  
HIV/AIDS**



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