Module 2
Natural history and clinical aspects

HIV basic knowledge and stigma reduction in health care settings
Module goals
<table>
<thead>
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| - describe the natural history of the HIV infection |
| - expose the main circumstances in which the HIV infection is discovered |
| - describe some of the clinical manifestations of the HIV/AIDS infection. |

| Participants will be able to:               |
| - name the techniques used for the biological diagnosis of the HIV infection |
| - argue the need to comply with ethical and confidentiality imperatives in the health care environment |
| - name the interventions to reduce HIV stigma and discrimination in health care settings. |

| Participants will be able to:               |
| - inform a PLHIV about how care is organized in the country |
| - inform a PLHIV about the principles of care |
| - inform parents about the care available for a newborn baby, infant or child infected by HIV |
| - argue the need for optimal adherence to antiretroviral therapy. |
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Early manifestations of HIV infection
Primary infection

- HIV infection is rarely suspected at this stage
- Often, there are no symptoms
- When there are symptoms, they are not specific to HIV:
  - Fever and/or influenza-like syndrome
  - Rash, etc
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**Physical symptoms**

- Asthenia
- Prolonged or relapsing fever
- Night sweating
- Weight loss
Mucocutaneous manifestations
Oropharyngal candidiasis
Hairy leukoplakia
Herpes zoster
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Prurigo

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Seborrhoeic dermatitis
Digestive manifestations

• Chronic diarrhoea: related to a banal or opportunistic intestinal parasitosis

• Relapsing florid oropharyngeal candidiasis
Respiratory manifestations
Tuberculosis
Conclusion

• Early manifestations are the circumstances in which HIV infection is discovered
• Health care personnel must be trained to recognize early manifestations of HIV infection
• Early diagnosis enables:
  - Early care
  - Better immune restoration
  - Reduced transmission
Main clinical manifestations of HIV infection
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Brainstorming

• Have you already had the opportunity to take care of an HIV patient?
• If so, describe the symptoms and signs you observed
• In your opinion, are these early manifestations of an HIV infection?
Brainstorming

• Can you name the respiratory symptoms observed during the HIV infection?
• Can the patient die as a result of these symptoms?
Brainstorming

• If you are examining a febrile, moderately dyspneic patient who coughs and expectorates whitish sputum, what possible causes would you consider?
The most frequent respiratory impairments

In practice

- Bacterial pneumonia
- Tuberculosis
- Pneumocystosis
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Tuberculosis

• In cases of moderate immunodeficiency, similar symptoms to an immunocompetent subject

• In cases of deep immunodeficiency
  - Frequency of extensive and serious forms
  - Emergence of resistant BK
  - Secondary effects of antituberculosis drugs

• Diagnosis
  - BK ++
  - Thorax X-ray: often normal
Pneumocystosis during AIDS
Epidemiology

- The germ: currently classified among fungi *Pneumocystis jirovecii*
- Source of contamination: patients and carriers of *Pneumocystis*
- Aerial transmission
Clinical presentation

• Pulmonary pneumocystosis
  - Start (CD4 < 200 cells /mm3)
    • Progressive
    • Dry cough with dyspnea and fever
  - Evolution towards acute respiratory failure

• Disseminated extrapulmonary forms: ganglionic, medullar, etc.
Prophylaxis and treatment

• Primary and secondary prophylaxis: co-trimoxazole

• Curative treatment
  - Co-trimoxazole
  - Oxygenation in serious forms
Brainstorming

• If you are examining a patient infected with HIV who presents a motor deficiency of monoplegia or hemiplegia type accompanied by fever, what possible causes would you consider?
The most frequent focalized neurological impairments

In practice

- Cerebral toxoplasmosis
- Cerebral tuberculoma
- Pyogenic cerebral abscess
Cerebral toxoplasmosis

• Inaugural manifestation of AIDS in 11% of cases

• Symptomatology
  - Persistent headache
  - Signs of localization: hemiparesia ...
  - Fever: 38 °C – 38.5 °C
  - Consciousness disorders
  - Partial or general convulsive crisis
Diagnostic arguments

• Imaging (CT, RMI)

• Trial treatment
  - Major diagnosis argument if response is positive within 14 days

• Toxoplasmosis serology
Cryptococcosis

• Start:
  - Gradual, insidious
  - Persistent headache
  - Moderate fever

• Followed by: vertigo, mood disorder, motor and sensory deficit

• Lumbar puncture (India ink stain)
  - *Cryptococcus neoformans*

• Cryptococcosis antigen test: cerebrospinal fluid, blood, urine...
HIV encephalitis

• In patients either untreated or whose therapy has failed

• Clinical
  - Attention and concentration disorders
  - Memory disorders
  - Depression
  - In an evolved phase: dementia

• Diagnosis
  - Cerebral MRI
  - Elimination diagnosis