Howard University
National HIV Curriculum Integration Project

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PRINCIPAL INVESTIGATOR/ PROJECT DIRECTOR

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MODULE 2 – BASIC HIV PRIMARY CARE

Faculty – John I. McNeil, MD, FACP

CASE STUDY #1

TONI HALL, MD
MEHARRY MEDICAL COLLEGE

CASE STUDY #1

Bobby, a 23-year-old college student, presents to establish care in the primary care clinic 5 months after initial HIV diagnosis in another state. He moved to the U.S. to attend college 5 years ago, initially in New Mexico and then in Illinois, from Malawi where he was born and where his mother and sister reside. He now lives in a house with 2 maternal aunts and his maternal grandmother. One aunt is aware of his HIV-positive status and is also HIV-positive. His father passed away 4 years ago in Malawi of meningitis. He reports that he was prescribed ART one month after HIV diagnosis but had not been able to fill his medication after taking it for 4 months, due to relocating to a different state and uninsured status.

CASE STUDY #1

He had presented with symptoms of malaise, fatigue, weight loss and finally pneumonia to multiple health clinics over a period of 1-2 years prior to testing for HIV. He speaks, reads and writes in English language without difficulty. He does not recall his most recent absolute CD4 count or CD4 count at time of diagnosis. He is able to recognize his previously prescribed single-tablet daily ART medication and to describe a daily liquid medication he took for prevention.

He reports no additional chronic medical problems. He denies, on multiple occasions when questioned alone without family present, any sexual contact whatsoever with anyone or any known history of blood transfusion. He explains that his decision to remain sexually abstinent until marriage is based upon religious beliefs. His demeanor is generally stoic, and he provides short, succinct replies to questions about personal life. He did undergo an ACL repair/replacement, performed 3 years ago related to a sports injury, and one tattoo placed 2 years ago in a "reputable, professional tattoo shop".

DISCUSSION

1. What social, employment, educational, financial, relationship and family planning/reproduction support services would you offer to this young, newly diagnosed HIV-positive patient?

2. Which coping strategies would you offer in light of the patient's stoic demeanor, expressed religious beliefs and living situation (in household with multiple female family members, some of whom are unaware of his diagnosis) in a culturally-sensitive, nonjudgmental, and patient-centered manner?

3. How does residence and travel history affect risk for endemic opportunistic and/or comorbid infections in this case?

4. Which optional baseline laboratory tests would you be prompted to obtain based upon history?

5. What are some identifiable risk factors for decreased retention in care and achievement of viral suppression?

CASE STUDY #2

JACQUEISE UNONU, PHARMD, PHD
HOWARD COLLEGE OF PHARMACY

CASE #2

Martha is a 46 yo AAF who is coming to the clinic as a new patient. She recently lost her job and thought it would be in her best interest to have a change of scenery and move to another state to look for employment. She is currently living with a family member. She was not too fond of her previous provider, so she had not had an office visit for about 4 months. She states that she decided to come in because she needs refills on all her medications. She has not taken her medications for about 3 or 4 weeks now. She was diagnosed with HIV in August of 2018 and believes she contracted it 3 years ago during the time when she was still injecting heroin. She went through a treatment program and has been clean since her HIV diagnosis. She also has a history of hypertension x 5 years and diabetes type 2 x 8 years.

CASE #2

Per the patient the current medication list includes metformin, Lantus insulin, hydrochlorothiazide, lisinopril, and bictegravir/TAF/emtricitabine. This is the only HIV regimen she has ever been on. She has no known drug allergies. She does not trust the ingredients in vaccinations.

Vitals were taken and a full workup was completed on Martha revealing some of the following results: a viral load of 6,239 copies/mL, CD4 count of 458, HgbA1c 9.5%, Scr 1.1 mg/dL, and BP 157/89. All other results were insignificant.

What are some challenges for client assessment and management ?

CONSIDER

Need to try to obtain records from previous provider; determine reasons why she was "not fond" of her previous provider in order to ease transition and address her needs; will need to determine how much of a role did the lack of medications for 3-4 weeks play into the current status of her conditions.

MANAGEMENT AND OUTCOMES

Medications- Insurance status should be addressed. She needs to be restarted on her medications immediately and the previous provider records should be used to gain insight into any barriers to adherence that may have been present. Once restarted follow up within 2-4 weeks to monitor for response.

Work with her closely to reach goal HgbA1c, BP, and undetectable viral load

Immunizations- All recommended immunizations should be offered.

Family support- Determine if she feels she has support at her new home and if her HIV status is known

Substance abuse counseling- Offer assistance with finding a support group.

OPEN DISCUSSION

1. What is the best way to approach Martha's trust issues regarding vaccinations?
2. How do you find out what barriers to treatment success were present, if any, when she was with her previous provider?
3. How will her new environment play a role in the successful treatment of her current conditions?

CASE STUDY #3

ETHEL HARRIS, DDS

MEHARRY MEDICAL COLLEGE

CASE STUDY #3

Subjective information: Tyrone is a 32-year-old African American male who has been in your care for several years.

He presents today with a **chief complaint:** "The roof of my mouth on one side stings like crazy". It started about two weeks ago and seems to be getting a little better in the last few days. When you review his record, you find the following:

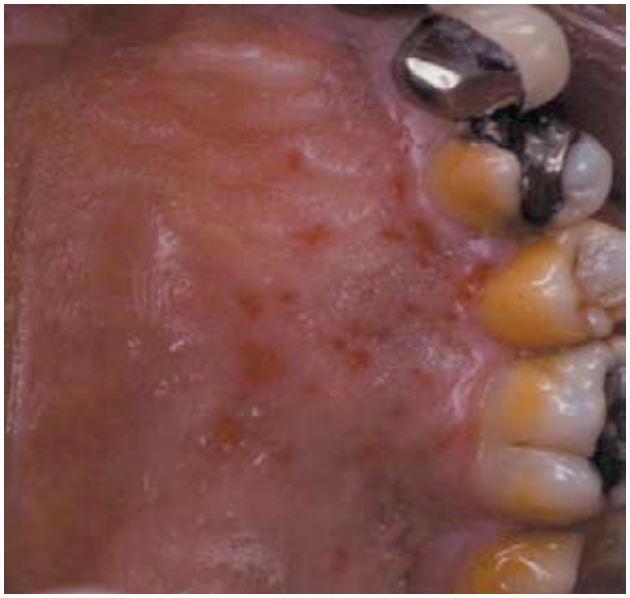
Drug History: Tyrone denies use of tobacco or illegal drugs. He reports occasional use of alcohol at 2-4 beers a week depending on his social activities. He is currently not taking any medications except for multivitamins.

Medical History: Tyrone's medical history has been noncontributory.

Dental History: He has had regular dental treatment, but it has been about a year since we last saw him.

Social History: Tyrone is a college graduate who works as an engineer. He states his sexual orientation to be homosexual.

CASE STUDY #3



Intraoral examination reveals multiple unilateral shallow ulcers (punctate) on the right side of the hard palate.

OPEN DISCUSSION

Is there anything in Tyrone's history that would indicate a risk of HIV infection? If so, what?

1. Develop a differential diagnosis for Tyrone's collection of lesions and indicate which is most likely:
    a) Spicy food burn
    b) Herpes Zoster
    c) Human papillomavirus
    d) Candidiasis

CASE STUDY #4

DARLENE HINDS-JACKSON, DNP, RN, CRNP, FNP-BC, CNE
COPPIN STATE UNIVERSITY

CASE STUDY #4

Tamika, a 20-year-old sophomore visited the University Health Center a few days ago for an HIV test/STI screen and the initiation of Depo-Provera. She reports having been sexually active with a total of two men in her lifetime. Both men she met when she started at the University. With both men, condoms were used most of the time. She reports they were "casual encounters, nothing serious". She is now in a relationship with someone and he wants them both to get tested before moving the relationship forward.

At the time of her initial visit, Tamika denied any concerns about having an STI. The provider documented that she was asymptomatic for the presence of any STIs. Labs results were negative for Gonorrhea, Chlamydia, Syphilis and Trichomonas. Her HIV was positive (list specific tests). Tamika's follow up for results is today.

What steps can the provider at the University take prior to meeting with Tamika?

CONSIDER

- The PCP should remember to be sensitive, supportive, and nonjudgmental.
- The PCP should prepare a referral with a specialist for Tamika. If possible, schedule an appointment that can be given to her prior to leaving.
- The provider should schedule extra time for this appointment in order to provide Tamika with support and answer any questions she may have.

At Tamika's first visit with the specialist what questions should be asked when obtaining the history according to the HIVMA Primary Care Guidelines?

CONSIDER

- Date of diagnosis of HIV infection and, if known, the approximate date of initial HIV infection
- Identified risk factors related to HIV acquisition
- Prior HIV-associated complications and comorbidities, including opportunistic infections, malignancies, and other HIV-related conditions
- Past medical history, including chronic medical conditions
- Past surgical history
- Psychiatric history, especially any history of depression, bipolar disorder, posttraumatic stress disorder, and domestic violence
- Residence and travel history (to determine if patient has lived in or traveled to regions endemic for certain diseases, such as histoplasmosis or coccidioidomycosis)

CONSIDER

- Medication history (including historical antiretroviral therapy past to present, over-the-counter drugs, pain medications, and dietary or herbal supplements)
- Allergies and intolerances to medications, including hypersensitivity reactions to antibiotics and antiretroviral medications
- Social history (assess for high-risk behaviors, tobacco, alcohol and illicit drug use), sexual history, including sexual practices (including all exposure sites, condom and contraceptive use), HIV status of their partners, and whether they have disclosed their HIV infection to their partners

CONSIDER

- Social support, coping strategies (including how a patient is dealing with a new HIV diagnosis or established HIV infection), employment status and history, financial status, housing, marital status, and desires related to family planning/reproduction
- Family history
- Comprehensive medical review of symptoms

What baseline labs should be drawn?

CONSIDER

- Complete Blood Count (CBC) with Differential
- Basic Chemistry Panel and Calculated Creatinine Clearance
- Hepatic Aminotransferase Levels
- Urinalysis
- Fasting Lipid Panel (Total cholesterol, HDL, LDL, Triglycerides)
- Fasting Plasma Glucose or Hemoglobin A1c

CASE STUDY #5

GAIL CHERRY-PEPPERS, DDS, MS
HOWARD UNIVERSITY COLLEGE OF DENTISTRY

CASE STUDY #5

A 34-year-old African-American male known to have HIV presented to a dental office with bleeding painful gums, candidiasis, and oral lesions on the floor of the mouth. Past medical history was significant for recent discharge from the hospital 10 days prior. Review of hospital medical documents and referral paperwork revealed admitting complaints of frequent cough, spitting blood upon rinsing, sore throat, lymph node enlargement and unexplained weight loss. Other significant lab and test results included: a positive tuberculin skin test (TST), and a CD4 count of 100 cells/uL. Due to the patient's immunosuppressed state, numerous oral manifestations were noted.

OPEN DISCUSSION

1. What signs and symptoms upon oral examination would help the dental health provider diagnose this patient?
2. What are some of the underlying medical conditions that would affect dental treatment outcomes ?
3. What additional co-morbidities might this patient be at risk for?
4. What is the best overall dental treatment plan for this patient with HIV?

CASE STUDY #6

ETHEL HARRIS, DDS

MEHARRY MEDICAL COLLEGE

CASE STUDY #6

Subjective information: Jack, a 26-year-old Caucasian male, presents to your dental office and says, "I want my teeth fixed before I get married in eight weeks." The patient, originally from the area, had been living out of state for a few years and has recently returned to live with his fiancé. Upon reviewing the patient's history, you encounter the following:

Drug History: Jack denies use of alcohol, tobacco, or drugs. He presently takes an occasional over-the-counter allergy medication. He has no known drug allergies.

Medical History: The patient's medical history is unremarkable except that he reports having "bad flu" several times over the past year. His physician prescribed antibiotics and he state, "I got better." He has had no surgery or hospitalization.

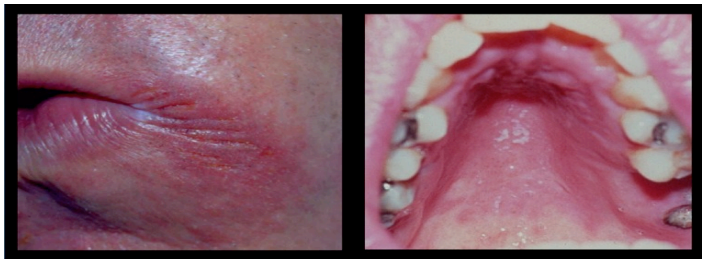
Dental History: Jack reports that he has not seen a dentist in at least two years. He states that his two lower front teeth had become very loose and he pulled them out. He further says, "I want to have a pretty smile when I get married."

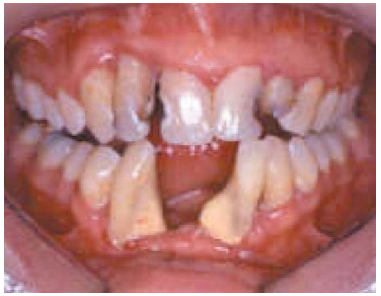
CASE STUDY #6

Social History: Jack lived with an injection drug user for two years while out of state. He did not use drugs himself but had a sexual relationship with one of his female roommates.

Chief Complaint: "Pain in the corners of his mouth as well as a burning sensation in his mouth and strange taste".

Extra/Intra Oral Exam: red area with splitting at the corner of his mouth, as well as flat, erythematous patches on the hard palate.





The comprehensive clinical exam on Jack reveals advanced, generalized periodontal disease with premature loss of several permanent teeth.

OPEN DISCUSSION

1. **From Jack's history and clinical examination what referral will be necessary.**

2. **What are the two types of oral candidiasis present in this patient?**

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