

Faculty Guide

Vaginal Itching



Acknowledgements

Program Development Team

Karen A. Amirehsani, PhD, FNP-BC, *Co-Investigator* Laurie Kennedy-Malone, PhD, GNP-BC, FAANP, FGSA, FAAN *Principal Investigator* Krystle H. Dove, DNP, AGPCNP-BC Md Towfiqul Alam, MBBS, MPH Jennifer Durham BSN, RN JoAnna Gontarz MSN, RN, CNE, NE-BC Thomas McCoy, PhD, PStat

Film Crew Team

Cinematographer & Editor: Ken Comito Camera Operator: Stephanie Savage Sound Mixer: Melanie Comito Director: Ken Comito Brain Juice Productions

Project Director

Laurie Kennedy-Malone PhD GNP-BC FAGHE, FAANP, FGSA, FAAN Professor of Nursing Eloise R. Lewis Excellence Professor National Hartford Center of Gerontological Nursing Excellence (NHCGNE) Distinguished Educator in Gerontological Nursing UNC Greensboro Greensboro NC <u>laurie_kennedy-malone@uncg.edu</u>

Nurse Practitioner Faculty AACN Essentials Experts:

Natalie R. Baker DNP, CRNP, GS-C, CNE, FAANP, FAAN | Associate Professor National Hartford Center of Gerontological Nursing Excellence Distinguished Educator in Gerontological Nursing President, Gerontological Advanced Practice Nursing Association (GAPNA) School of Nursing UAB | The University of Alabama at Birmingham Birmingham, Alabama

Mary DiGiulio DNP, APN, FAANP Associate Chair of Graduate Nursing Director of DNP and NP Programs Moravian University Bethlehem, Pennsylvania

Evelyn G. Duffy DNP, AGPCNP-BC, FAANP Florence Cellar Professor of Gerontological Nursing Director of the Adult-Gerontology Nurse Practitioner Program National Hartford Center of Gerontological Nursing Excellence Distinguished Educator in Gerontological Nursing Associate Director of the University Center on Aging and Health Frances Payne Bolton School of Nursing Case Western Reserve University Cleveland, Ohio

Candace Harrington PhD, DNP, APRN, AGPCNP-BC, CNE, FAAN Assistant Professor Gerontology NP Professor National Hartford Center of Gerontological Nursing Excellence Distinguished Educator in Gerontological Nursing University of Louisville School of Nursing Louisville, Kentucky

Autumn Henson DNP, GNP-BC, WCC Post-BSN-AGNP Concentration Coordinator Assistant Clinical Professor University of North Carolina at Greensboro Greensboro NC

Multimedia Development Team

Dr. Susie Boles, Assistant Director, Instructional Design - Project Manager and Instructional Designer Patrick Griffin, Assistant Director, Multimedia - Video Editor Nichole McGill, Executive Assistant to the Dean - Tester Nathan Myers, Instructional Designer - Tester Leerie Jenkins, Technology Application Analyst - Closed Captioning

Contact information for questions:

Laurie Kennedy-Malone: <u>lmkenne2@uncg.edu</u>

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How These Videos Were Developed

These patient videos were scripted by UNCG School of Nursing professional educators. The scenarios are fictitious but based upon real circumstances and acted out by professional actors. The videos are available on YouTube and H5p platforms. Interactive questions were inserted into the videos using the h5p.org online platform. Closed captioning is included for increased accessibility.

The Academic Practice Partnerships Today for Competent Practitioners

Tomorrow (APPTCPT) video case simulations have been designed to enhance nurse practitioners' skills in health history, advanced physical assessment, diagnostic reasoning, and developing management plans. These video case simulations integrate the *Adult-Gerontology Primary Care Nurse Practitioner Competencies* (AACN, 2016) in the learning objectives.

Course Use

You can link to or embed these videos for your class. H5P videos can be assigned to students to complete as homework or completed in small groups or as a whole class for discussion. H5P videos can be incorporated into a learning management system (LMS) to track student responses. The YouTube videos can be linked or embedded in your course.

Using these Videos with an LMS for Formative Learning

Blackboard: Here are instructions for how to incorporate <u>h5p videos into Blackboard</u>.

Canvas: Using Canvas with H5P.com

To collect students' scores, you'll need an h5p.com account. To get started with H5P in Canvas just go to <u>H5P.com</u> and start a 30 days free trial. You should make sure your Canvas admin is ready to <u>set up the LTI integration</u>. By using H5P.com, the content is inserted right away, grades are stored in the gradebook and you can see what your users

answered. Then you can download these ANEW patient videos from h5p.org and import them into your h5p.com account using these <u>import/export instructions</u>.

Moodle: See these <u>instructions for using h5p.org with Moodle</u>.

Disclaimer:

As new scientific information becomes available through basic and clinical research, recommended treatments and therapies undergo changes. At the time of development, the authors have done everything possible to make this simulation case accurate with accepted standards at the time of production.

INTRODUCTION

This simulation video case, **"Vaginal Itching"** presents primary care nurse practitioner learners an opportunity to develop their diagnostic reasoning and advanced health assessment skills/knowledge to function in an APRN role. Learners can discuss and collaborate to diagnosis the patient presentation and develop an appropriate plan of care for treatment and address any preventative care needs. The learning focus of this simulation video case can be for nurse practitioner learners early in their clinical management program or be adjusted to learners at the end of their education program by adding content such as laboratory testing, photographic laboratory samples, and applying the current CDC Guidelines on Sexually Transmitted Infections.

LEARNING OBJECTIVES

This video case simulation prepares learners to:

- 1. Distinguish between normal and abnormal changes in vaginal complaints and conditions based upon scientific knowledge in physiological conditions and diseases
- 2. Identify differential diagnoses in a patient presenting with vaginal itching and request for sexually transmitted infection testing
- 3. Develop an evidence-based clinical management plan that takes into consideration the cost of the work-up and treatment(s) and patient preferences
- 4. Discuss educational and disease prevention strategies for patients with sexually transmitted infections and who engage in risky behaviors
- 5. Adapt teaching on the management of the disease condition and disease prevention based on the patient's readiness to learn, health literacy, and resources.

The charts below were developed through a consensus process by the five nurse practitioner faculty experts who independently reviewed the videos and the faculty guides to determine the relevance of the content of the video and assignments with each of the domains, advanced level nursing education competencies, essentials level 2 sub-competencies and the concepts. The competencies, sub competencies and concepts listed here have an 80% consensus on the item (Polit et al., 2006).

Domain, Competencies, and Sub-competencies for Advanced-level Professional Nursing

Knowledge for Nursing Practice

1.1 - Demonstrate an understanding of the discipline of nursing's distinct perspective and where shared perspectives exist with other disciplines.

1.1e Translate evidence from nursing science as well as other sciences into practice.

1.1f Demonstrate the application of nursing science to practice.

1.2 - Apply theory and research-based knowledge from nursing, the arts, humanities, and other

1.2g Apply a systematic and defendable approach to nursing practice decisions.

1.3 - Demonstrate clinical judgment founded on a broad knowledge base.

1.3d Integrate foundational and advanced specialty knowledge into clinical reasoning.

1.3e Synthesize current and emerging evidence to Influence practice.

1.3f Analyze decision models from nursing and other knowledge domains to improve clinical judgment.

Person-Centered Care

2.1 - Engage with the individual in establishing a caring relationship.

2.1d Promote caring relationships to effect positive outcomes.

2.1e Foster caring relationships.

2.2 - Communicate effectively with individuals.

2.2g Demonstrate advanced communication skills and techniques using a variety of modalities with diverse

2.3h Demonstrate that one's practice is informed by a comprehensive assessment.

2.4f Demonstrate that one's practice is informed by a comprehensive assessment

2.4g Integrate advanced scientific knowledge to guide decision making.

Scholarship for the Nursing Discipline

4.2 - Integrate best evidence into nursing practice.

4.2f Use diverse sources of evidence to inform practice.

Adapted with permission from American Association of Colleges of Nursing. American Association of Colleges of Nursing. (2021). The essentials: Core competencies for professional nursing

education. https://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf

Concepts for Nursing Practice

Clinical Judgment

Communication

Compassionate Care

Diversity, Equity, Inclusion

Ethics

Evidence-Based Practice

Social Determinants of Health

Learners of Advanced Practice Health Professions:

- Family Nurse Practitioner (FNP)
- Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP)
- Women's Health Nurse Practitioner
- Adult-Gerontology Acute Care Nurse Practitioner (AGACNP)
- Physician Assistant (PA)

CASE OVERVIEW

Case: Debra Martinez is a 38-year-old woman who presents to the local health department clinic with complaints of vaginal itching and seeking testing for sexual transmitted infections (STIs). She has been engaging in risky sexual behaviors since her divorce 1 year ago. Actual diagnosis: Trichomanias, risky behaviors.

Case Setting: This is a focused visit and there is no prior medical record to review as the patient has just recently moved to the area.

Case Background Information for Faculty: Debra Martinez thinks she may have a sexually transmitted infection (STI) because she "hooked up" over the weekend. She had sexual intercourse 4 days ago and has developed "funny" yellow drainage with a strange odor over the last couple of days. She reports some vaginal itching and discharge and slight dysuria. The vaginal drainage and itching are increasing. She denies change in urine color or increased urinary frequency. Last month after being with the same sexual partner, she developed vaginal drainage and was diagnosed with a STI at an urgent care clinic. The patient states the medication and treatment received at the urgent care was way too expensive, so today she has come to the health department to be evaluated. She is not sure what type of STI she had last month; however, she reports her symptoms went away after taking a one-time medication. She does not know if this sexual partner was ever treated, because she does not see him often or know him that well. She never informed him about having a STI after being with him. She has never had blood drawn to test for STIs.

When asked about condom use, she states she usually uses condoms, but not always. She admitted to getting carried away and drinking excessively over the weekend. She is not positive that condoms were used during this last occasion. She has had 2 male sexual partners before she was married at age 22. She was married for about 15 years, divorced a year ago; now "enjoying her freedom." She has lost track of how many male sexual partners since her divorce, maybe 3 or 4. Her last Pap smear was 2 years ago and was told it was normal.

Physical findings and vital signs: *** This information is <u>not available</u> in the H5P video with embedded interactive questions or YouTube video. Faculty can provide the students with these physical findings and vital signs or develop their own for in-class or small group discussion/activities.

Physical exam: VS: temp 98.2 F, pulse 72/min, RR 24, BP 118/70 Ht: 5'3". Wt 128 lbs

General: Well developed, well-nourished female, no acute distress **Respiratory:** Lungs CTA posteriorly and anteriorly bilaterally

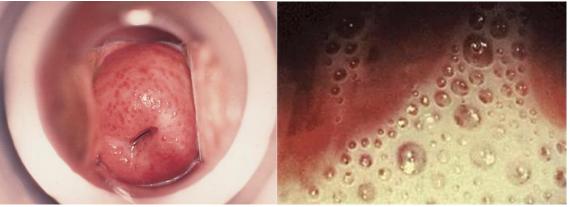
Cardiovascular: heart sounds: RRR, no murmurs, rubs, or gallops

GI: abdomen active BS x 4 quads and soft. Nontender to percussion or palpation. No rebound, guarding, or dominant masses.

Gynecological exam: Inguinal lymph nodes: bilateral inguinal lymph nodes are palpable and slightly tender to palpation. External genitalia: pubic hair is shaved. No lesions. Yellow-green drainage at introitus. Internal genitalia: copious amounts of

thick frothy yellow-green discharge. Cervix has petechiae. No cervical motion tenderness with bimanual exam. Uterus is normal size and shape. No adnexal tenderness.

Labs: Wet mount: Many WBCs present. No clue cells or yeast present. Positive for trichomonads. Urine analysis: Specific gravity = 1.02, pH = 6.2, protein = negative, glucose = negative, ketones = negative, bilirubin = negative, blood = negative, nitrite = negative, leukocytes = positive



Cervix & discharge looks like this:

Case Simulation: Sexually Transmitted Infection (8:54 minutes)

- Interactive video h5p link: <u>https://h5p.org/node/405972</u>
- YouTube link: <u>https://youtu.be/fwGsV_-22sk</u>

INTERACTIVE H5P CASE QUESTIONS*

- 1. Given the chief complaint, which of the following conditions would the nurse practitioner consider as possible causes of her vaginal symptoms? Select all that apply.
 - a. Urinary tract infection
 - b. Allergic reaction to spermicides
 - c. Gonorrhea
 - d. Chlamydia
 - e. Bacterial vaginosis
 - f. Trichomonas infection
 - g. Herpes simplex virus
 - h. Vulvovaginal candidiasis
 - i. HIV
 - j. Syphilis
 - k. Pelvic inflammatory disease

- 2. Based upon the patient's HPI, select all of the pertinent positives reported by the patient. Select all that apply.
 - a. Yellow discharge for 2-4 days
 - b. Abdominal pain
 - c. Worsening vaginal discharge
 - d. Vaginal itching
 - e. Vaginal odor
 - f. Fever
 - g. No relief from OTC Vagisil
- 3. From the HPI, identify the pertinent negatives reported by the patient for pelvic inflammatory disease (PID). Select all that apply.
 - a. Afebrile
 - b. No nausea or vomiting
 - c. No CVA tenderness
 - d. No abdominal or pelvic pain
 - e. No postcoital spotting
- 4. Based upon the patient's history, what screening tests might the NP consider administering? Select all that apply.
 - a. CAGE questionnaire
 - b. Sexual Risk Survey
 - c. PHQ-9 questionnaire
 - d. No screening tests are indicated
 - 5. Since the filming of this video, the FDA expanded the age indication for the Human Papillomavirus 9-valent vaccine for both males and females. What age range should the NP currently recommend the HPV vaccine to males and females?
 - a. 9 to 26 years of age
 - b. 9 to 30 years of age
 - c. 9 to 35 years of age
 - d. 9 to 45 years of age
 - 6. With a wet mount, which of the following would be present if the patient has bacterial vaginosis?
 - a. Hyphae
 - b. Positive 10% KOH whiff test
 - c. Trichomonads
 - d. Clue cells
 - e. Sperm
 - 7. On exam, the NP notes large amount of frothy yellow-green vaginal discharge, cervical petechiae, no cervical motion tenderness or adnexal tenderness, and wet mount positive for trichomonads and many WBCs. What is the most likely diagnosis?
 - a. Bacterial vaginosis
 - b. Vulvovaginal candidiasis
 - c. Urinary tract infection
 - d. Chlamydia

e. Trichomoniasis

- f. Pelvic inflammatory disease (PID)
- g. Gonorrhea

*bolded responses are correct answers

POSSIBLE DISCUSSION QUESTIONS

- 1. What are the pertinent positives and negatives learned from the history of present illness (HPI) and review of systems (ROS)?
- 2. Based on the subjective findings of the chief complaint and HPI, what are the top five differential diagnoses? Support your choices with rationales.
- 3. Identify pertinent positives and negatives in the physical findings. Explain the meaning of these findings. How do they assist in the ruling in or out a differential diagnosis?
- 4. Identify the pertinent positives and negatives in the physical findings. Explain the meaning of these findings. (*Possible answers for faculty):
 - a. Positives:
 - Frothy yellow-greenish colored vaginal discharge
 - Cervix with petechiae
 - Wet mount with large amount of WBC's present
 - Wet mount positive for trichomonads
 - U/A positive for leukocytes
 - b. Negatives:
 - No cervical motion tenderness
 - No adnexal tenderness
 - No external lesions
 - No clue cells or hyphae present in wet mount
 - U/A negative for nitrites and blood
- 5. What diagnostic test(s) are the most appropriate to order during this visit? Explain your rationale for ordering each test(s).
- 6. What is your diagnosis? Describe your management plan to initiate today. Include a rational for your choice(s).
- 7. What are some preventative care measures or health promotion initiatives that could be included in the management plan?
- 8. How would you counsel this patient about risky behaviors?
- 9. What questionnaire could you use to assess for risky behaviors?

REFERENCES

American Association of Colleges of Nursing. (2021). The essentials: Core competencies for professional nursing education. https://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf

- Barrow, R. Y., Ahmed, F., Bolan, G. A., & Workowski, K. A. (2020). Recommendations for providing quality sexually transmitted diseases clinical services, 2020. MMWR. Recommendations and Reports, 68(5), 1–20. https://doi.org/10.15585/mmwr.rr6805a1
- Cantor, A., Dana, T., Griffin, J. C., Nelson, H. D., Weeks, C., Winthrop, K. L., & Chou, R. (2021). Screening for chlamydial and gonococcal infections. JAMA, 326(10), 957. https://doi.org/10.1001/jama.2021.10577
- Centers for Disease Control and Prevention. (2021). Sexually transmitted infections treatment guidelines, 2021 [PDF]. https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf
- Centers for Disease Control and Prevention. (2021a, July 22). Bacterial vaginosis sti treatment guidelines. https://www.cdc.gov/std/treatment-guidelines/bv.htm
- Centers for Disease Control and Prevention. (2021b, July 22). Urethritis and cervicitis sti treatment guidelines. https://www.cdc.gov/std/treatment-guidelines/urethritis-andcervicitis.htm
- Centers for Disease Control and Prevention. (2021c, July 22). Vulvovaginal candidiasis sti treatment guidelines. https://www.cdc.gov/std/treatment-guidelines/candidiasis.htm
- Centers for Disease Control and Prevention. (2021d, August 3). Cdc's sti treatment guidelines timeline: The evolution of sexual healthcare. https://www.cdc.gov/std/treatment-guidelines/timeline.htm
- Centers for Disease Control and Prevention. (2021e, November 9). *Pelvic inflammatory* disease (pid) - sti treatment guidelines. https://www.cdc.gov/std/treatmentguidelines/pid.htm
- Centers for Disease Control and Prevention. (2022a, January 25). Chlamydial infections sti treatment guidelines. https://www.cdc.gov/std/treatment-guidelines/chlamydia.htm
- Centers for Disease Control and Prevention. (2022b, January 31). Gonococcal infections among adolescents and adults - sti treatment guidelines. https://www.cdc.gov/std/treatment-guidelines/gonorrhea-adults.htm
- Centers for Disease Control and Prevention. (2022c, February 2). *Trichomoniasis sti treatment guidelines*. https://www.cdc.gov/std/treatmentguidelines/trichomoniasis.htm
- Diamond, V., Harman, J., & Gerend, M. A. (2020). The underuse of sti prevention counseling in primary care. *Sexually Transmitted Diseases*, 47(8), e18–e20. https://doi.org/10.1097/olq.00000000001182
- Ellington, K., & Saccomano, S. J. (2020). Recurrent bacterial vaginosis. *The Nurse* Practitioner, 45(10), 27–32. https://doi.org/10.1097/01.npr.0000696904.36628.0a

- Fawcett, S. E., Williams, A. A., Johnson, E. E., & Ramsey, K. M. (2021). Treatment of chlamydia and gonorrhea infections during the covid-19 pandemic using provisional centers for disease control guidance. *Journal of the American Association of Nurse Practitioners*, 34(2), 373–380. https://doi.org/10.1097/jxx.00000000000642
- Krist, A. H., Davidson, K. W., Mangione, C. M., Barry, M. J., Cabana, M., Caughey, A. B., Donahue, K., Doubeni, C. A., Epling, J. W., Kubik, M., Ogedegbe, G., Pbert, L., Silverstein, M., Simon, M. A., Tseng, C.-W., & Wong, J. B. (2020). Behavioral counseling interventions to prevent sexually transmitted infections. JAMA, 324(7), 674. https://doi.org/10.1001/jama.2020.13095
- Kumar, S., Chesson, H., & Gift, T. L. (2020). Estimating the direct medical costs and productivity loss of outpatient chlamydia and gonorrhea treatment. *Sexually Transmitted Diseases*, 48(2), e18–e21. https://doi.org/10.1097/olq.00000000001240
- Lau, A., Kong, F. Y., Fairley, C. K., Templeton, D. J., Amin, J., Phillips, S., Law, M., Chen, M. Y., Bradshaw, C. S., Donovan, B., McNulty, A., Boyd, M. A., Timms, P., Chow, E. P., Regan, D. G., Khaw, C., Lewis, D. A., Kaldor, J., Ratnayake, M.,...Hocking, J. S. (2021). Azithromycin or doxycycline for asymptomatic rectal chlamydia trachomatis. *New England Journal of Medicine*, 384(25), 2418–2427. https://doi.org/10.1056/nejmoa2031631
- Leichliter, J. S., & Aral, S. O. (2021). Scientific and programmatic gaps in std prevention: A 2020 assessment. Sexually Transmitted Diseases, 48(8S), S88–S89. https://doi.org/10.1097/olq.00000000001449
- Levy, S. B., Gunta, J., & Edemekong, P. (2019). Screening for sexually transmitted diseases. *Primary Care: Clinics in Office Practice*, 46(1), 157–173. https://doi.org/10.1016/j.pop.2018.10.013
- O'Brien, C. P. (2008). The cage questionnaire for detection of alcoholism. *JAMA*, *300*(17), 2054. https://doi.org/10.1001/jama.2008.570
- O'Byrne, P. (2019). Recommended screenings for chlamydia and gonorrhea. *The Nurse Practitioner*, 44(2), 35–41. https://doi.org/10.1097/01.npr.0000552681.53898.05
- Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, 29(5), 489–497
- Turchik, J. A., & Garske, J. P. (2008). Measurement of sexual risk taking among college students. Archives of Sexual Behavior, 38(6), 936–948. https://doi.org/10.1007/s10508-008-9388-z
- Wi, T., Ndowa, F. J., Ferreyra, C., Kelly-Cirino, C., Taylor, M. M., Toskin, I., Kiarie, J., Santesso, N., & Unemo, M. (2019). Diagnosing sexually transmitted infections in resource-constrained settings: Challenges and ways forward. *Journal of the International AIDS Society*, 22(S6). https://doi.org/10.1002/jia2.25343