



Implementation of Preventive Care in a Large Urban Veterans Affairs HIV Clinic

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Abstract

Background and Purpose

Our hospital's VA Infectious Diseases (ID) Clinic follows 1182 HIV patients. Females number 67. With HIV viral suppression in >73%, a need existed to also focus on prevention. From 2018 through 2021, 386 patients with gonorrhea and 718 with chlamydia were identified hospital-wide. Houston has been identified as a high prevalence area for STIs (sexually transmitted infections) and metropolitan data indicate that chlamydia, gonorrhea and syphilis rates exceed that of the entire state. Of 57 patients with anal carcinoma in ID Clinic, 33 were diagnosed from 1/1/15-12/31/21. We did not have an established screening program for anal PAP and though performing rectal exams is included in the clinic guidelines it is not consistently done. The objective was to establish an anal pathology screening program within the ID clinic. Performance of cervical PAP smears and mammograms for women is a VA primary care performance metric. With multiple clinic providers, the adherence to screening recommendations was not at goal. Hence, a need was identified to focus on prevention efforts, specifically in a) STI prevention, and prompt diagnosis and treatment, b) screening/management for anal pathology/anal carcinoma, c) women specific preventive care.

Description and Methodology

ID implemented an STI Clinic, Anal Cytology Clinic (ACC) and a Women's Health Clinic. The STI Clinic was introduced to Primary Care Providers in 2018 with an STI consult and rapid evaluation with appropriate screening (HIV, renal function, hepatitis (A, B, C), non-identified STD testing) and a clinical psychology evaluation. The ACC and Women's Clinics were implemented in 8/2021. No set guidelines exist for anal cytology in HIV patients. Referral is based on findings of anal condylomas, dysplasia history, no prior anal cytology and anal sex. Clinics are staffed by a physician assistant, nurse practitioner, clinical pharmacist and a clinical psychologist.

Results

182 referrals have been made to the STI Clinic from 01/01/2018 - 12/31/2021. 718 cases of Chlamydia have been identified and 386 cases of gonorrhea hospital wide. Of these, 25 chlamydia and 41 gonorrhea cases were reported in HIV positive patients. There were 164 syphilis cases in those HIV positive, not including more than one occurrence in the time period. Though we do not have total hospital numbers, it is reasonable to suggest that we parallel the metropolitan data. There are 48 patients in the ACC with cytology results. Bethesda nomenclature are used for classification and include Human papilloma virus (HPV) type and range from atypical squamous cell of undetermined significance (ASC-US), to high grade intra-epithelial lesions (HSIL). 8 have HPV 16 and 6 HPV 18, the most carcinogenic genotypes. Data will be collected for the Women's Clinic in a prospective manner. The potential is to include all women in the Women's Clinic including male to female transgender patients with emphasis on timely PAP smears and mammograms.

Discussion and Conclusions

With large numbers of STIs in primary care patients, need for detailed sexual histories, referral to the STI Clinic persists and suspicion for HIV must be high. Rectal exams must be done on new HIV patients or patients reporting rectal pain/itching/bleeding. Consolidation of Women's Health into the ID Clinic establishes longitudinal follow-up without scheduling difficulties, improved follow-up for women previously lost to care and negates the need for another new non-ID provider. The implementation of these 3 clinics has paved the way for continued improvement.

Background



- The Houston area has been identified as one of high prevalence for STIs and metropolitan data indicate that chlamydia, gonorrhea and syphilis rates exceed that of the entire state.
- Our hospital's VA Infectious Diseases (ID) Clinic follows 1182 HIV patients. Females number 67. Of 57 patients with anal carcinoma in ID Clinic, 33 were diagnosed from 1/1/15-12/31/21. We did not have an established screening program for anal dysplasia/carcinoma, and though performing rectal exams is included in the clinic guidelines it is not consistently done.

- Performance of cervical PAP smears and mammograms for women is a VA primary care performance metric. With multiple clinic providers, the rate of adherence to screening recommendations was not at goal.



- Hence, a need was identified to focus on prevention efforts, specifically in
 - STI prevention, and prompt diagnosis and treatment
 - screening/management for anal pathology/anal carcinoma
 - women specific preventive care.

Objectives:

- To implement a process for rapid evaluation of patients at high risk for and/or with a diagnosis of sexually transmitted diseases, including HIV, through an STI Clinic.
- To establish an anal pathology screening program within the ID clinic.
- To improve adherence for preventive cervical PAP smears and mammograms by centralizing the process with a single Women's ID health provider.

Description and Methodology

- To review the outcomes of the implementation within ID clinic of the STI Clinic (introduced in 2018), Anal Cytology Clinic (ACC) and a Women's Health Clinic (the latter two introduced in 2021).
- Clinics are staffed by a nurse practitioner, physician assistant, clinical pharmacist and a clinical psychologist.

The STI Clinic



- Primary Care provider initiates the STI Consult with key components:
 - History** - previous STI, sexually active, sexually active substance user, new sex partner, sex partner with concurrent partners and/or concurrent STI, active drug use, HIV positive injection partner, shared injection equipment
 - STI symptoms** - asymptomatic, urethritis, cervicitis, dysuria/discharge, rectal pain/discharge/bleeding, genital ulcer, lymphadenopathy, rash, pelvic pain
 - Infectious Disease Consult Manager** receives and contacts patient, a visit is scheduled within 24-48 hours

Completing the STI Consult

- Sexual History:
 - Sex with men, women or both, last sexual activity
 - Partners: # of sex partners in the past 3 months, HIV status of partners, anonymous partner sex, initial contact mechanism with partner
 - Practices: anal or oral sex, insertive or receptive (top or bottom), self/partner IVDU, self/partner received/given money or drugs for sex, frequency of alcohol, speed, cocaine or other drug use during sex
 - Past history of STI's: last positive test for an STI, what was the STI
 - Protection from STI's: condom use with sex (always, sometimes, never)
 - Pregnancy plans: children/more children, methods to prevent unwanted pregnancies



LABS

- HIV Ag/AB, HCV AB, RPR, Hepatitis A, Hepatitis B, Creatinine /BUN
- Urine GC/Chlamydia/Trichomonas, rectal/and/or oral gonorrhea/ Chlamydia; urine mycobacterium genitalium



ASSESSMENT

High risk of HIV acquisition
Recommend Emtricitabine/tenofovir alafenamide (Descovy)
Discuss side effects
Reinforce condom use



Follow-up

- Refer to ID Mental Health for HARP (Houston Assessment of Readiness for PrEP) to assess patients in the STI Clinic for at-risk health behaviors and substance/alcohol use or mental health concerns which may impact adherence to PrEP if they have expressed an interest in receiving it. The mental health concerns include depression, anxiety, trauma, substance use disorders and cognitive impairment.
- Refer to ID Clinical Pharmacist if PrEP is initiated for consultation on medication adherence and side effects.
- Return in 3 months if PrEP initiated with all baseline labs 1 week prior.



The Anal Cytology Clinic

- Clinic practice adapted from the New York State Dept of Health Aids Institute Clinical Guidelines for "Screening for Anal Dysplasia and Cancer in Patients with HIV".
- "It has been estimated that Human Papilloma Virus Infection (HPV) is responsible for approximately 91% of anal cancers. It can infect cells on the surface of the skin, and those lining the genitals, anus, mouth and throat."⁵



The Anal Pap Smear

- No anal sex or douching within 24 hours prior to procedure
- Verbal informed consent obtained
- Patient placed in left lateral position
- Peri-anal skin examined and digital rectal exam performed
- Lubricated anoscope inserted into rectum
- Obturator withdrawn to allow brushing of the anal mucosa for Anal Cytology (Surepath) and HPV (Thin prep) and swabbing simultaneously for Gonorrhea/Chlamydia.
- Within 5-7 days Pap results will be available and HPV results in 14 days



The Women's ID Health Clinic

- A comprehensive list of all female patients in the HIV Clinic has been compiled using the VA's HIV Data Cube.
- Those lost to follow-up for PAP smears and mammograms during the COVID pandemic have been contacted to schedule as indicated.
- When performing the PAP smear, women are simultaneously swabbed for Gonorrhea and Chlamydia.
- These visits also provide the opportunity for a complete review of VA's clinical reminders that also could be overdue during the pandemic.



Results

- 182 referrals have been made to the STI Clinic from 01/01/2018 - 12/31/2021. 718 cases of Chlamydia have been identified and 386 cases of gonorrhea hospital wide. Of these, 25 chlamydia and 41 gonorrhea cases were reported in HIV positive patients. There were 164 syphilis cases in those HIV positive, not including more than one occurrence in the time period.
- There are 48 patients in the ACC with cytology results. Bethesda nomenclature are used for classification and include Human papilloma virus (HPV) type and range from atypical squamous cell of undetermined significance (ASC-US), to high grade intra-epithelial lesions (HSIL). 8 have HPV 16 and 6 have HPV 18, the most carcinogenic genotypes. Of these, 3 have both types.
- Data will be collected for the Women's Clinic in a prospective manner. The potential is to include all women in the Women's Clinic including male to female transgender patients (not included in the 67 identifying as female birth sex) with emphasis on timely PAP smears and mammograms.

Conclusions

With large numbers of STI's in primary care patients, there is a need for PCPs to obtain detailed sexual histories. The process of referrals to the STI Clinic fulfills a need to provide timely assistance to primary care providers and suspicion for HIV must be high.

Guidelines recommend that rectal exams be done on new HIV patients or patients reporting rectal symptoms. An anal cytology clinic provides additional evaluation in clinic and assist in earlier identification of patients that need referral for further evaluation.

Consolidation of Women's Health as a separate clinic within the ID Clinic provides improved longitudinal follow-up without scheduling difficulties, improved follow-up for women previously lost to care and negates the need for another non-ID new provider.

The implementation of these clinics has paved the way for continued improvement.

References

- D'Souza, G., Wentz, A., Wiley, D., Shah, N., Barrington, F., Darragh, T. M., Joste, N., Plankley, M., Reddy, S., Green, E. C., Young, S., & Cranston, R. D. (2016). Anal Cancer Screening in Men Who Have Sex With Men in the Multicenter AIDS Cohort Study. *Journal of acquired immune deficiency syndromes (1999)*, 71(5), 570-576. <https://doi.org/10.1097/QAI.0000000000000920>
- Workowski, K. A., Bachmann, L. H., Chan, P. A., Johnston, C. M., Muzny, C. A., Park, I., Reno, H., Zenilman, J. M., & Bolan, G. A. (2021). Sexually Transmitted Infections Treatment Guidelines, 2021. *MMWR. Recommendations and reports: Morbidity and mortality weekly report. Recommendations and reports*, 70(4), 1-187. <https://doi.org/10.15585/mmwr.mm70r4>
- Wu, P. F., Hang, J. F., Strong, C., Chen, S. J., Lin, L. Y., Chen, S. S., Lai, C. R., Ku, S. W., & Lee, M. H. (2020). Anal human papillomavirus and its associations with abnormal anal cytology among men who have sex with men. *Scientific reports*, 10(1), 3165. <https://doi.org/10.1038/s41598-020-59967-4>
- Burchell, A. N., Kendall, C. E., Cheng, S. Y., A. Cotterchio, M., Bayoumi, A. M., Glazier, R. H., Antoniou, T., Baboolal, J., Yudin, M. H., & Loufty, M. (2018). Cervical cancer screening uptake among HIV-positive women in Ontario, Canada: A population-based retrospective cohort study. *Preventive medicine*, 107, 14-20. <https://doi.org/10.1016/j.ypmed.2017.11.023>
- <https://www.cancer.org/cancer/anal-cancer/about.html>. Accessed 3/21/22.

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