

Desquamative Inflammatory Vaginitis: Risk Factors to Remember

Nicolás C Merritt, DAT, ATC, PA-S; Jenny Smith, MSc, PA-C
MGH Institute of Health Professions Physician Assistant Program

Background

Due to limited data, the incidence and prevalence of desquamative inflammatory vaginitis (DIV) is unclear:

- Between 0.8% and 4.3% of women with vulvovaginal symptoms suffer from DIV.¹
- Unknown etiology
- Presents with a loss of normal vaginal flora and a noninfectious, immune-mediated attack on the vaginal mucosa.²
- Without any current screening methods, DIV is a diagnosis of exclusion confirmed with microscopy.³
- Immunocompromised patients may be at a higher risk of developing DIV and studies have shown an increase in DIV in patients taking rituximab.⁴

Description of Case

- A 39-year-old female G1P1001
- Two-week history of itching and burning on vulva and vagina with thick, white discharge.
- Over a four-week period, PCP prescribed three doses of Diflucan and one dose each of Monistat and Flagel, due to continued symptoms and positive testing for Bacterial Vaginosis.
- She presented eight weeks after initial symptom onset to our gynecology clinic
- Medical history significant for granulomatosis polyangiitis treated with rituximab, recurrent infections including pneumonia, sinusitis, and cellulitis.
- Last menstrual period three weeks ago with a regular cycle every 26 days. No history of STIs and not sexually active due to dyspareunia.

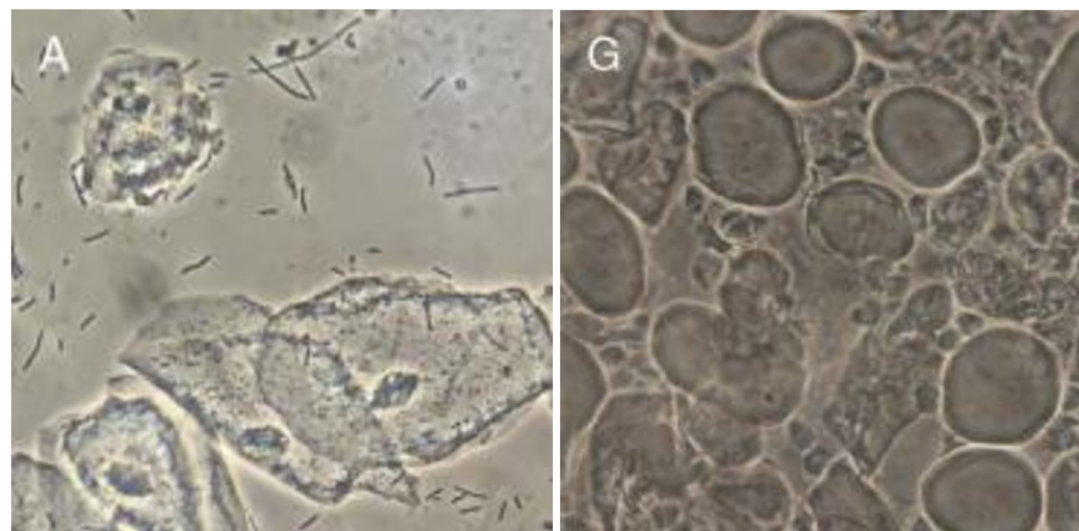


Figure A: Normal Vaginal Flora;
Figure G: Desquamative Inflammatory Vaginitis.³

Diagnosis and Treatment

The patient presented anxious, afebrile, normotensive. On exam:

- normal cardiac rhythm, and non-labored respirations on room air.
- External pelvic exam with normal bilateral labia majora and vulva. Internally, diffuse amount of yellow mucous discharge with thin fluid-like consistency and generalized vaginal erythema. Collected genital cultures.
- Bimanual exam was without cervical motion tenderness or adnexal tenderness.
- Wet Mount: pH >7.5, increased numbers of parabasal and inflammatory cells with numerous leukocyte WBCs, absence of *Lactobacilli*, yeast, clue cells, trichomonads, and red blood cells.

Treatment:

- prescribed intravaginal clindamycin 2% nightly and planned to follow up in 4-6 weeks.

Acknowledgements

Special thanks to Melissa Chittle, Jenny Smith, Dr. Trevin Lau, and Dr. Leen Al Kassab

Discussion

To our knowledge, this is the first case report of a middle-aged female with granulomatosis polyangiitis who presented with symptoms and exam findings indicative of DIV. In addition, the patient has been taking rituximab which has been associated with increased prevalence of secondary DIV. Studies show that prolonged B-cell depletion in patients treated with rituximab for autoimmune disorders can result in inflammatory vaginitis.⁴ Although it is not possible to confirm that multiple Diflucan administrations and Flagel contributed to our patient's symptoms, it is an additional risk factor that can be considered in the development of DIV.

Conclusion

- It is likely that immunodeficiency (granulomatosis polyangiitis), consistent use of rituximab, multiple Diflucan administrations/Flagyl placed our patient at a higher risk for developing DIV.
- PAs should be aware of these risk factors and counsel all their patients on rituximab treatment about the risk of DIV and its symptoms.

References

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