Discussion

• Paget disease of the breast presents as eczematous skin changes that involve the central nipple with variable extension into the areola. This clinical finding yields a high index of suspicion for breast carcinomas that are associated with Paget disease.

• Paget cells range in shape, with an increase in the nuclei size and amount of chromatin, and inconspicuous nucleus.

• Although Demodex folliculorum is primarily found on the face and nasolabial areas, the mite has been found in sebaceous glands of the nipple. There was no documented pathophysiological changes associated with these findings, and the mites were not found in the central, superficial nipple.

• Immunogenicity of the host is questioned to be directly impacted by the mites, or to allow for adequate replication and infestation to cause signs and symptoms. Studies have proven that mites cause local immunosuppression, decreasing the efficiency of the hosts immune response. The dampened ability to kill the mites allows for symptomatic infestation.

• The medical literature reports that oral or topical metronidazole formulations and metronidazole-vermecin combination therapies are the most safe and efficacious.

Conclusions

• Demodicosis is the proper nomenclature for pathophysiological changes related to infestation by Demodex species.

• D. folliculorum is a common ectoparasite that does not always cause dermatologic changes or symptoms.

• Symptomatic infestation of the central nipple is uncommon.

• Given the similar presentation of Paget disease of the breast and demodicosis of the nipple, a biopsy is critical to rule out malignancy.

References

6. Quinnipiac University Physician Assistant Program.