Blisters of Mystery: Shedding Light on Bullosis Diabeticorum as a Rare Complication of Long-Standing Diabetes Mellitus

Zein Barakat, PGY-1, DO MS

Lakeland Regional Health, Lakeland, Florida – ACGME program affiliated with NOVA Southeastern KCP Osteopathic Medicine

INTRODUCTION

- ❑ Bullosis diabeticorum is a rare dermatological complication of both type 1 and type 2 diabetes mellitus.
- ❑ It manifests as abrupt, non-inflammatory, tense, subepidermal bullae, that spontaneously resolve over the course of a few weeks.
- ❑ They typically appear on lower extremities and are often mistaken for burns or other traumatic injuries.
- ❑ The exact pathogenesis remains unclear, but microvascular complications of diabetes, including diabetic neuropathy and microangiopathy, are thought to play a role.
- ❑ Diagnosis is primarily clinical, with histopathological examination revealing diabetic microangiopathy within the blister walls.

HEALTHCARE IMPACT

- Understanding and documenting diabetic complications is necessary to improve our knowledge of patient presentations.
- In order to minimize the potential negative impact of implicit biases on patient care in the medical profession, physician-leaders have a responsibility to understand biases and how to consciously override them.
- It essential to continuously learn and raise awareness among healthcare professionals about emerging diseases.
- Interprofessional collaboration among gastroenterologists, dermatologists, and endocrinologists is vital for comprehensive management of diabetic patients.

CASE PRESENTATION

- A 27-year-old female with longstanding type 1 diabetes mellitus, diabetic neuropathy, dyslipidemia, anorexia nervosa, depression, and anxiety presented with complaints of hematuria, burning urination, intermittent right flank pain, and bilateral lower extremity and feet blisters of varying sizes resembling burns.
- Upon examination, the patient exhibited fever and tachycardia.
- Laboratory testing was significant for an elevated HbA1c level of 11%.
- Urinalysis revealed hematuria, bacteriuria, and leukocytosis, with E. coli growth in urine cultures.
- Antibiotic therapy was initiated for the urinary tract infection.
- However, the enigma in this case stemmed from the presenting blisters.
- Initial concerns of self-infliction arose due to the patient's psychiatric history.
- However, a comprehensive psychiatric assessment confirmed her stability and denied any evidence of self-harming behavior.
- Deeper history-taking revealed that these self-resolving blistering episodes have been recurrent for three years.
- Patient was instructed to follow up with Dermatology upon discharge, where they will perform a biopsy to rule out blistering disorders.
- If biopsy shows evidence of spongiosis in the epidermis and blister formation in the subepidermis with negative immunofluorescent staining, the diagnosis of bullosis diabeticorum can be confirmed.



Figure 1. An example of recurrent blistering lesions in a patient with long-standing diabetes.

DISCUSSION

- ❑ Bullosis Diabeticorum, an uncommon dermatological complication of diabetes, remains inadequately documented in medical literature.
- ❑ This presentation emphasizes the diagnostic challenges of bullosis diabeticorum and the rarity of this complication.
- ❑ A pivotal aspect of this case is the initial bias towards self-infliction of the blisters. It is critical that we perform unbiased, thorough evaluations, especially when managing patients with psychiatric history.
- ❑ Patients with bullosis diabeticorum should be monitored for the development of secondary infections until lesions heal entirely. Due to the higher prevalence of microangiopathic complications in these patients, ophthalmological and neurological examinations are recommended along with monitoring of renal function.
- ❑ This report not only highlights the existence of this disease but also underscores the importance of raising awareness among healthcare professionals.

CONCLUSION

In conclusion, this case reinforces the significance of a multidisciplinary approach in managing complex diabetes presentations, warns against medical bias, and emphasizes the importance of further research and case documentation to enrich our understanding of rare diabetic complications, ultimately advancing more informed and effective patient care.

REFERENCES

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