Cutaneous pseudolymphoma secondary to gabapentin

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DESCRIPTION

A middle-aged woman presented with a 'pimple that won't heal'. She stated that it slowly enlarged over her left cheek for 6 months. She denied any symptoms of itchiness nor pain. She previously tried topical metronidazole for 6 weeks without improvement. She used acetaminophen and ibuprofen on occasion for 10 years to combat her migraine headaches, plus her neurologist recently initiated her on gabapentin. The patient noted that her presenting problem started 3 weeks after she initiated the gabapentin. Throughout this period of time, she also continued to take ibuprofen approximately three times weekly. She denied using any other medicines. Additionally, she denied a bug bite to her left cheek. On examination, a single dimesized, non-scaly plaque with slight erythema was located on her left cheek (figure 1). The rest of her skin exam was unremarkable. A single punch biopsy revealed a dermal mixed infiltrate consisting of predominantly lymphocytes plus scattered eosinophils, histiocytes and neutrophils. Features of follicles with a germinal centre were appreciated. The lymphocytes were positive for both T-cell and B-cell markers and polyclonality was shown, evidenced by negative gene rearrangement studies. Serology including HIV, rapid plasma reagin, Lyme titres and connective tissue serology were negative.

The patient was diagnosed with a cutaneous pseudolymphoma (CPL). Gabapentin was suspected to have been the causative factor since the patient developed the CPL 3 weeks after initiating the medicine. Accordingly, the patient stopped the



Figure 1 The left face showing a small plaque with slight erythema and no scale.

gabapentin (permitted by the patient's neurologist) and her condition resolved 2 months later. The patient admitted to continuing the ibuprofen and acetaminophen throughout her improvement.

Drug-induced CPLs are historically known to be caused by anticonvulsants, antidepressants, immunosuppressive drugs, xanthine oxidase inhibitors and antihistamines. The presentation of CPL is often papules and nodules, sometimes accompanying erythema. Histologically, most CPLs have mixed T-cell and B-cell populations, and they often contain macrophages plus dendritic cells. First-line treatment for drug-induced CPL is discontinuation of the offending medication, while local corticosteroids may yield additional support.

Gabapentin was introduced as an alternative to other antiepileptic medication, such as phenytoin, for individuals who have hypersensitivity syndrome. Since its introduction, only two reported cases of hypersensitivity syndrome secondary to gabapentin have been documented. Yet, no cases of CPL secondary to gabapentin have been reported.

Learning points

- Anticonvulsants, antidepressants, immunosuppressive drugs, xanthine oxidase inhibitors and antihistamines can cause cutaneous pseudolymphoma (CPL).
- ► Gabapentin was observed to cause CPL on the face of a middle-aged woman.
- ► Drug-induced CPL should be managed by removing the offending agent.

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REFERENCES

 Magro CM, Daniels BH, Crowson AN. Drug induced pseudolymphoma. Semin Diagn Pathol 2018;35:247–59.



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- 2 Miguel D, Peckruhn M, Elsner P. Treatment of cutaneous pseudolymphoma: a systematic review. Acta Derm Venereol 2018;98:310–7.
- 3 Ragucci MV, Cohen JM. Gabapentin-induced hypersensitivity syndrome. *Clin Neuropharmacol* 2001;24:103–5.

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