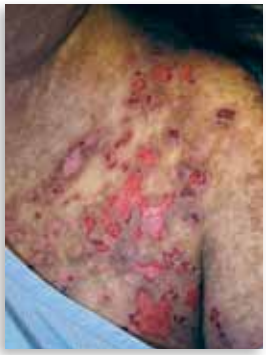
Answer to Dermacase *continued from page 712*

3. Pemphigus vulgaris



Pemphigus vulgaris (PV) is a rare but serious autoimmune mucocutaneous blistering disorder. It most commonly affects individuals between 40 and 60 years of age, has no sex predilection, and is most prevalent in those of Eastern Mediterranean, Ashkenazi Jewish, and Northern Indian descent.[1-3]

In this disease, autoantibodies are directed against desmoglein 3 and, less commonly, desmoglein 1, both of which are keratinocyte adhesion molecules in the basal layer of the epidermis.[1,4] This autoimmune process results in loss of intercellular cohesion (acantholysis) and, therefore, blister formation.[1,2,4] In 80% of cases, PV initially presents as painful, nonhealing oral erosions, which can be the sole manifestation of the disease for weeks to months before skin lesions occur.[1,2] Skin lesions often appear on the scalp, face, chest, and upper back; they are typically flaccid, sharp, round or oval, coin-sized blisters that are easily ruptured, leaving behind crusts, erosions, and a loose epidermal collarette.[1] Often at presentation the fragile blisters will have already ruptured, so that only painful skin erosions that bleed easily are observed.[1] If blisters are intact, the Nikolsky sign can be sought; if firm, lateral pressure applied with a finger separates normal-appearing skin, producing an erosion, then this is indicative.[1] The Nikolsky sign is nonspecific, however, and can be found in other active blistering diseases.

Drug-induced forms of PV have been described. Penicillamine and angiotensin-converting enzyme inhibitors, such as captopril, are most commonly implicated.[1]

In severe cases, the extensive mucocutaneous involvement in PV might result in problems similar to those experienced by burn victims, such that life-threatening complications, including sepsis, thermoregulatory loss, and electrolyte disturbance, might occur.[1] All patients with suspected PV should be promptly referred to dermatologists to confirm diagnosis and initiate treatment of this rare and complicated disease. Family physicians should contact dermatologists directly for advice and urgent referral, or should send their patients to the emergency department to be seen by the dermatologist on call.

Diagnosis

Diagnosis of PV is first based on clinical findings, then on histologic and immunofluorescence (IF) investigations. A biopsy from either a blister or its edge is used for histologic study; hematoxylin and eosin staining demonstrate suprabasilar acantholysis and distinct intraepidermal blistering, with minimal evidence of inflammation[1,2,4,5] Immunofluorescence studies are required to confirm diagnosis. Direct IF staining of perilesional skin consistently shows tissue-fixed, intercellular deposition of immunoglobin (Ig) G and, less often, IgM, IgA, and complement C3 in 90% of PV patients.[1,2,4,5] In addition, circulating IgG autoantibodies that correlate with disease activity are present in about 80% of patients with active infection, which can be detected by indirect IF study of patient serum.[1,4]

Management

Corticosteroids, typically prednisone (1 mg/kg/d), are the treatment of choice for PV. It is reasonable for prednisone to be started by family physicians based on suspicion of PV before assessment by dermatologists. The steroids are slowly tapered over the course of 1 year, with regular reassessment of patient response; should the disease flare up, a higher maintenance dose is reintroduced. To minimize the long-term side effects of systemic corticosteroid therapy, steroid-sparing agents, such as azathioprine, cyclophosphamide, or mycophenolate mofetil, can be added as adjuvant therapy, either at the same time as or 1 to 2 months after initiating prednisone therapy. For severe, rapidly progressive, or recalcitrant cases, pulse steroids or other immunomodulating agents, such as intravenous Ig, biologics, or plasmapheresis (which physically removes plasma autoantibodies), might be considered.[1,2,5] Newer biologics, such as infliximab or rituximab, are options for aggressive disease.[1,3] Steroid and steroid-sparing agents might require 4 to 6 months to take full effect.

It is important to advise patients that conservative measures, such as wound care and avoidance of factors that could exacerbate PV (dental work, sun exposure, trauma, stress, and radiographs), should be employed.[1] Patients should be reassured that since the introduction of steroid therapy in the 1950s, PV can now be well controlled, with a 5-year mortality of less than 10%.[3] However, patients should likewise be educated about the high mortality rates of PV if left untreated (100% mortality at 5 years),[3] and be advised to seek regular medical care, especially if there is evidence of disease recurrence or secondary infection.

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Competing interests
None declared

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