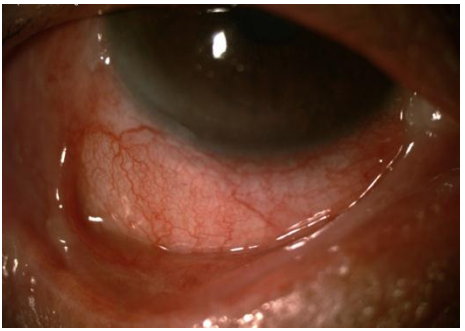
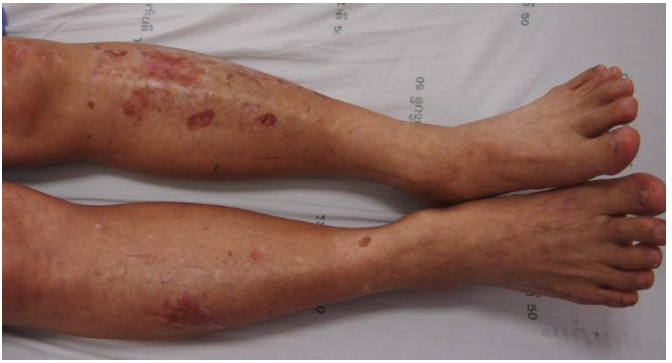
**Case 23**

A 65-year-old Thai man from Phuket.

**Chief complaint**: Pain and decreased visual acuity on left eye for 3 days.





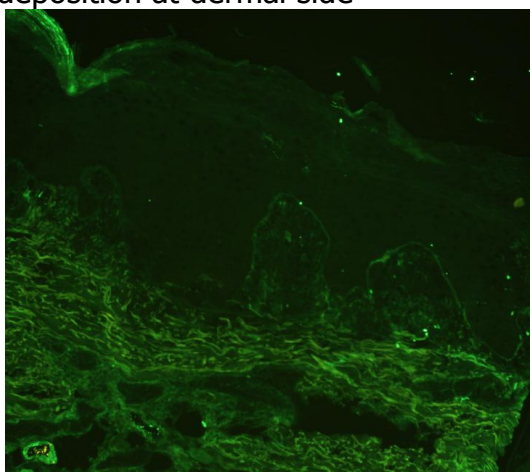
**Present illness**: The patient developed recurrent bullae that ulcerated and healed with scar on trunk and extremities for 2 years. In June 2012, he underwent the skin biopsy at Phuket which shown subepidermal blister with numerous lymphocytes, neutrophils and eosinophils, suggestive of Bullous pemphigoid. His symptoms did not improved by either oral prednisolone or dapsone. The ulcers healed slowly and tended to recur. In January 2013, he developed severe eye irritation and decreased visual acuity.

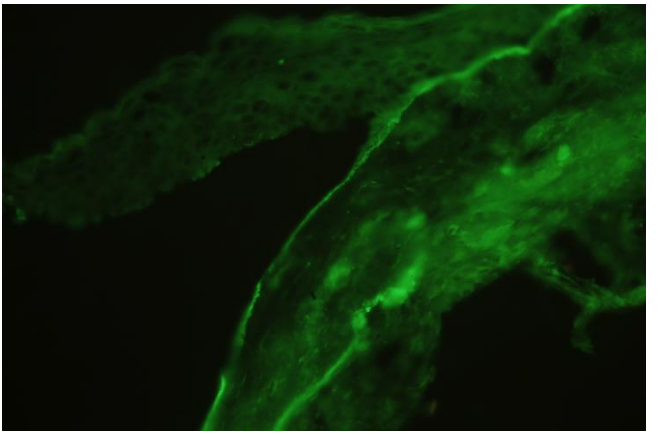
**Past history** Diabetes mellitus type 2, hypertension, dyslipidemia.
**Family history** nil
**Skin examination**: Oral mucosa: several erosive ulcers on soft palate. Multiple erosions overlying scarring plaques on upper back and both lower legs.
**Physical Examination**:
HEENT: Injected conjunctiva both eyes with yellowish crusted discharge and corneal haziness on left eye. (Figure.)
Heart: normal S1 S2, no murmur
Lung: normal breath sound
Abdomen: soft, no hepatosplenomegaly
Neurological exam: intact
**Histopathology:** (S13-5040)

H&E (Conjunctiva): Superficial dermatitis with neutrophils and epidermal hyperplasia.

Direct immunofluorescence: Continuous linear deposits of IgG, C3 in the epidermal basement membrane.

Direct immunofluorescence of IgG 1M NaCl spilt skin test: Linear deposition at dermal side





**Laboratory investigation:** Conjunctival culture grew numerous *Enterococcus spp.*

**Diagnosis:** Cicartricial pemphigoid with enopthalmitis left eye.
**Treatment:** Pulse cyclophosphamide 1mg/kg/dose every 1 month total 6 pulses
Prednisolone 1mg/kg/day
Intravenous and intravitreous vancomycin and ceftazidime for enopthalmitis.

**Presenter:** Tueboon Sriphojanart, M.D.
**Consultant:** Kumutnart Chanpraparp, M.D.

**Discussion**

Cicatricial pemphigoid (CP) is a rare chronic autoimmune subepithelial blistering disease characterized by erosive lesions of mucous membranes and skin that result in scarring at sites of involvement.[1-3] CP has been estimated to occur in approximately 1 person per million annually; females

are affected 1.5–2.0 times as often as males and has a mean age of onset of early to middle 60s.[4, 5] A variety of autoantibodies directed against autoantigens in epidermal basement membrane are held responsible for the pathogenesis of CP. Bullous pemphigoid antigen 2 (BPAG2) represents a major cicatricial pemphigoid autoantigen; other autoantigens include laminin 332, integrin subunit $\beta_4$, integrin subunit $\alpha_6$, type VII collagen, and bullous pemphigoid antigen 1 (BPAG1).[6, 7]

Patients typically describe the onset of painful, erosive, blistering lesions on one or more mucosal surfaces which the oral mucosa is the most frequent site of involvement. Ocular involvement is also common and may become sight threatening. Early ocular disease can be quite subtle and nonspecific that patients may complain of burning, dryness, or a foreign-body sensation in one or both eyes which best appreciated by slit-lamp examination. Chronic ocular involvement can result in scarring characterized by shortened fornices, symblepharons and ankyloblepharons. Conjunctival scarring also can cause entropion and trichiasis that result in corneal irritation, ulceration, and/or blindness.[8, 9] The skin is involved in 25%–35%; the most frequently affected areas are the scalp, head, neck, and upper trunk where typically consist of small vesicles or bullae situated on erythematous and/or urticarial bases. Lesions rupture easily and are often seen as small, crusted papules or plaques that heal with scars. Antiepiligrin CP (antilaminin 332) appears to have an increased relative risk for solid organ malignancy. The time between blister onset and cancer diagnosis was approximately 14 months.[10, 11]

The findings of light microscopy of lesional skin or mucosa from patients with CP characteristically show a

subepidermal blister and a dermal leukocytic infiltrate composed of lymphocytes and histiocytes as well as neutrophils and eosinophils. Direct immunofluorescence of normal appearing perilesional tissue shows continuous deposits of IgG and C3 in epithelial basement membranes; the predominant subclass is IgG4.[12] 1 M NaCl spilt skin test increases the sensitivity of direct immunofluorescence microscopy and facilitates identification of immunoreactants as well as their distribution within epithelial basement membranes which may show linear deposition of either dermal or epidermal site.
Indirect immunofluorescence studies using intact skin or mucosa often find low-titer IgG (and/or IgA) antibasement membrane autoantibodies.[13]

CP is typically a chronic and progressive disorder. The treatment is usually determined by severity and site of organ involvement. Mild lesions of the oral mucosa and skin can be treated effectively with topical glucocorticoids or calcineurin inhibitorstwo to four times each day. For moderate involvement, systemic glucocorticoids (20-60mg/day) alone or in conjunction with daily dapsone may be effective. For severe disease affecting the ocular, pharyngeal, or urogenital epithelia, combinations of systemic glucocorticoids and additional immunosuppressives, intravenous immunoglobulin or biologic agents are indicated.[14- 16]

This patient received pulse cyclophosphamide 1mg/kg/dose every 1 month for 6 pulses, prednisolone 1mg/kg/day, intravenous and intravitreous vancomycin and ceftazidime for enopthalmitis. All of the lesions response well. The screening for occulted malignancy was done, which showed negative result. However, regular follow up is necessary.

## References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