A healthy 18-year-old Chinese man presented to the emergency department with a 1-day history of mild tender swelling of his crown, forehead and temples (Fig. 1). He was newly enlisted in the military and had recently shaved his head in the past week. He had just completed an outdoor physical training session when he noticed that his forehead had begun to swell progressively. There was no associated fever, itch, lip swelling or shortness of breath. There were no preceding new medications, supplements, contactants or illnesses. Family history was unremarkable.

The patient was diagnosed with acute scalp oedema secondary to sunburn based on his clinical presentation. There were 6 other military recruits from the same company who presented similarly. All of the recruits were not wearing headgear during their physical training exercise. Out of the 7 recruits, 3 were treated with a short course of prednisolone, while 4 were managed expectantly. During follow-up a week later, resolution of the swelling was noted in all 7 patients (Fig. 2). Sun protection advice was given and there were no further occurrences.

What is the diagnosis for his condition?
A. Acute scalp oedema from sunburn
B. Allergic contact dermatitis
E. Photoallergic contact dermatitis
F. Phototoxic drug reaction
G. Acute cutaneous lupus erythematosus

Answer: A

Discussion
Acute scalp oedema secondary to sunburn is a clinical diagnosis. Individuals typically present with the gradual development of a fluctuant boggy mass over the scalp after acute intense sun exposure. Physical examination usually reveals erythema over the sun-exposed areas of the scalp and face, corresponding to the swelling. Patients are well, except for mild skin tenderness. Systemic symptoms should point to an alternative diagnosis.

Differential diagnoses include allergic contact dermatitis and photo-distributed dermatoses. A comprehensive history and examination are paramount. A history of
In conclusion, acute scalp oedema secondary to sunburn is not uncommon but is under-recognised. A history of intense and prolonged sun exposure, recently shaven head and evidence of sunburn in a patient with new-onset frontotemporal swelling should prompt suspicion of this diagnosis. Given that majority of Singaporeans do not practise sun safety habits regularly\(^4\) despite our equatorial climate with high levels of UV radiation, it is important for doctors to be cognisant of this entity to prevent unwarranted investigations. Sun protection awareness (e.g. headgear and sunblock) should be raised among military commanders to reduce incidence of similar cases.

REFERENCES


Jamie Xiang Lee Kee, \(^1\)MBBS, Wei Liang Koh, \(^1\)MBBS, MRCP, Wai Leong Kok, \(^2\)MBBS

\(^1\) Department of Dermatology, Changi General Hospital, Singapore
\(^2\) Specialist Health Services, Military Medicine Institute, Headquarters Medical Corps, Singapore Armed Forces, Singapore

Address for Correspondence: Dr Jamie Xiang Lee Kee, Department of Dermatology, Changi General Hospital, 2 Simei Street 3, Singapore 529889. Email: jamie.kee@mohh.com.sg