



Letter in Reply: Important Points in Toxic Epidermal Necrolysis Management

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Dear Editor,

Thank you for raising all of these points.¹ There was a delay in referring the patient to the dermatology team, which was out of our hands, as the medical team saw the patient first and suspected dengue fever since the patient had been traveling and was of South Asian origin. However, after we saw the patient, we started treatment immediately.

Classically, toxic epidermal necrolysis (TEN) is considered as part of a group of cutaneous hypersensitivity reaction with a spectrum of severity, erythema multiforme (EM) followed by Stevens-Johnson syndrome (SJS), and TEN.² Data and photos in our hospital computer system for the first 10 days after admission, showed a typical spectrum of this disease, as in the beginning, the patient was having EM (skin involvement with target lesions) which progressed to SJS (skin with mucous membranes involvement), and finally TEN (widespread epidermal sloughing). No other differential diagnosis were considered (our team diagnosed the case as TEN, based on clinical presentation and we started the treatment immediately, however, biopsy was done and the result came later confirming the diagnosis).

Score for Toxic Epidermal Necrolysis (SCORTEN) was not done, as it would not help in the prognosis. Firstly, because we were already late by 10 days after admission (it should be done on day one and three of admission according to international protocols)³ and secondly, the patient started to have fatal complications (skin infection, septicemia, and disseminated intravascular coagulation).

There is no consensus on specific therapy for TEN. The primary treatment consists of removal

of the offending agent along with transfer to an intensive care or burns unit and supportive therapy.

We do not doubt the effectiveness of intravenous immunoglobulin (IVIg) and steroid treatment for TEN. However, there is no evidence to support IVIg use in patients with TEN in Oman, as no randomized controlled trials have been conducted to confirm that IVIg is an effective medicine in TEN. However, we have good experience using IVIg and according to statistical data on admitted patient with TEN in several hospitals in Oman, we found a significant decline in mortality rates during the last 20 years after using IVIg.

We also have a good experience using steroid treatment for many years, and we know if we start this therapy at a high dose for a short time, we can arrest disease progression (the prognosis would be better if started early in the course of the disease). In this case report, we focused on the economic cost of the combination of low doses of IVIg and steroid.⁴ We did not mention other modalities of treatment reported in the literature including cyclosporine, plasmapheresis, tumor necrosis factor inhibitors, granulocyte colony-stimulating factor, and N-acetylcysteine.

Optimal treatment guidelines for TEN are still unavailable. Cyclosporine could be a promising option.⁵ However, we have no experience with this drug and may try it in the future.

The patient was not in a healing stage when we saw him on day 10, but was in a very critical condition, the disease was rapidly progressing with severe conjunctival hemorrhage, extensive epidermal separation, secondary skin infection, septicemia, and disseminated intravascular coagulation. However,

we managed to arrest disease progression with this low-cost synergistic treatment along with supportive care.

REFERENCES

1. Sultan Al-Shaqsi. Important points in toxic epidermal necrolysis management. *Oman Med J* 2019 Jul;34(4):357-358.
2. Bastuji-Garin S, Rzany B, Stern RS, Shear NH, Naldi L, Roujeau JC. Clinical classification of cases of toxic epidermal necrolysis, Stevens-Johnson syndrome, and erythema multiforme. *Arch Dermatol* 1993 Jan;129(1):92-96.
3. Guégan S, Bastuji-Garin S, Poszepczynska-Guigné E, Roujeau JC, Revuz J. Performance of the SCORTEN during the first five days of hospitalization to predict the prognosis of epidermal necrolysis. *J Invest Dermatol* 2006 Feb;126(2):272-276.
4. Jagadeesan S, Sobhanakumari K, Sadanandan SM, Ravindran S, Divakaran MV, Skaria L, et al. Low dose intravenous immunoglobulins and steroids in toxic epidermal necrolysis: a prospective comparative open-labelled study of 36 cases. *Indian J Dermatol Venereol Leprol* 2013 Jul-Aug;79(4):506-511.
5. Valeyrie-Allanore L, Wolkenstein P, Brochard L, Ortonne N, Maitre B, Revuz J, et al. Open trial of cyclosporine treatment for Stevens-Johnson syndrome and toxic epidermal necrolysis. *Br J Dermatol* 2010 Oct;163(4):847-853.