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STEVENS–JOHNSON SYNDROME–TOXIC EPIDERMAL NECROLYSIS OVERLAP SUSPECTED TO BE INDUCED BY A POLYPHARMACY COMPOUNDED PREPARATION FOR TRIGEMINAL NEURALGIA - THE CHALLENGE OF DRUG CAUSALITY ASSESSMENT: A CASE REPORT

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ABSTRACT

Background. Stevens–Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are severe mucocutaneous reactions that are predominantly drug-induced. Identification of the culprit drug becomes difficult when a patient receives compounded preparations containing multiple active ingredients at once, a practice still encountered in primary care.

Case. A 62-year-old woman presented with a generalized eruption of dusky red macules that progressed to flaccid bullae and erosions within hours, accompanied by mucosal involvement with a positive Nikolsky sign. An epidermal detachment of 23.5% placed this case in the SJS–TEN overlap category. During the preceding 30 days, the patient had received seven prescriptions of compounded preparations for trigeminal neuralgia, with a composition that changed at almost every visit, including carbamazepine, three non-steroidal anti-inflammatory drugs, paracetamol, triamcinolone, gabapentin, and diazepam.

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SCORTEN on admission was 2, with a predicted mortality of 12.1%. ALDEN causality assessment of all active ingredients yielded two drugs with an identical score of 5, i.e., the probable category, namely carbamazepine and meloxicam; therefore, a single culprit could not be established.

Management and outcome. All suspected drugs were discontinued, and the patient received intravenous methylprednisolone, wound care with 0.9% NaCl compresses and topical antibiotics, as well as mucosal care. Lesion progression ceased within 24 hours of drug withdrawal, re-epithelialization began on day 7, and the patient was discharged on hospital day 11 with lesions that had partly evolved into post-inflammatory hypopigmented and hyperpigmented macules.

Conclusion. Prescribing multi-ingredient compounded preparations increases the risk of severe drug reactions while permanently obscuring identification of the culprit, because drug provocation testing is contraindicated. Structured causality assessment and visit-by-visit documentation of exposure are minimum requirements before a drug is declared the culprit and recorded as a lifelong contraindication for the patient.

Keywords: Stevens-Johnson Syndrome-Toxic Epidermal Necrolysis overlap; compounded preparation; ALDEN Score; carbamazepine; meloxicam

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INTRODUCTION

Stevens–Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are severe mucocutaneous reactions characterized by necrosis and detachment of the epidermis and mucosal epithelium. The two are distinguished by the extent of body surface area affected by epidermal detachment: less than 10% of body surface area is classified as SJS, 10–30% as SJS–TEN overlap, and more than 30% as TEN [1]. Their annual incidence is estimated at 0.94 to 9.2 cases per million population [2]. Mortality increases with lesion extent, at approximately 10% in SJS and reaching 50% in TEN [1]; a systematic review of 1,059 case reports spanning four decades recorded a mortality of 21.1% in the SJS–TEN overlap group [3]. The most common causes of death are sepsis and multiple organ failure [2].

Most cases are triggered by drug intake, with antibiotics (26.9%), anticonvulsants (18.5%), and analgesics (11.9%) being the most frequently reported drug classes [3]. Carbamazepine is the most commonly prescribed anticonvulsant and also the one most frequently implicated in these cases [2], and a meta-analysis reported a prevalence of antiepileptic-associated SJS of 23.22%, with a higher rate in Asia (24.84%) than in the Americas (11.20%) and Europe (11.70%) [4]. This regional difference is partly explained by genetic background: HLA-B*15:02 is strongly associated with carbamazepine-induced SJS/TEN [5], and this association has also been confirmed in the Javanese and Sundanese populations of Indonesia [5]. Another drug class warranting vigilance is the oxicam-derived NSAIDs, which, among all NSAIDs, show the strongest association with this disease [2]. The highest risk occurs during the first three weeks of drug administration and within the first eight weeks of therapy [2].

Determination of the culprit drug based solely on review of the drug history is prone to inaccuracy in the setting of polypharmacy, an incomplete history, or inaccessible medical records, whereas drug provocation testing, the gold standard, is contraindicated in SJS/TEN [6]. The consequences of failed identification are bidirectional: patients may be forced to avoid drugs or drug classes that are in fact safe, or conversely be re-exposed to the drug that was actually the

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principal culprit [6]. Compounded preparations containing several active ingredients at once may aggravate this problem, because a single prescription entails simultaneous exposure to a number of candidate drugs suspected of being the culprit. Multi-ingredient preparations have indeed been mentioned among the triggering agents of SJS/TEN [2], but reports presenting the exposure history in detail remain very limited.

We report a 62-year-old woman with SJS–TEN overlap that developed after receiving seven prescriptions of polypharmacy compounded preparations within 30 days for complaints suggestive of trigeminal neuralgia. This report aims to describe the clinical course of the case and, more importantly, to demonstrate the importance of structured causality assessment, starting with identifying when intake of each drug began and when it was stopped, particularly when the patient is exposed to several high-risk drugs simultaneously.

CASE REPORT

Patient Information

A 62-year-old woman, body mass index 25.0 kg/m² (weight 60 kg, height 155 cm), presented with a generalized blistering eruption that appeared acutely in the early morning hours and progressed rapidly within hours.

Chief complaint. A blistering rash that began on the back and then spread to the face, arms, and legs until it involved almost the entire body; both eyes were red, swollen, and had a sticky discharge, making them difficult to open; the lips were blistered; and odynophagia made it difficult for the patient to eat or drink.

Approximately one month before the onset of the skin lesions, the patient experienced facial pain and consulted a general practitioner. She was subsequently diagnosed with trigeminal neuralgia and received several types of compounded medications in stages over the 30-day period preceding the current complaints. The treatment regimen underwent several changes at each visit and included celecoxib, paracetamol, triamcinolone, gabapentin, diazepam, carbamazepine, meloxicam, diclofenac potassium, ranitidine, and a vitamin B preparation. The patient received

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seven prescriptions of compounded preparations within 30 days, with a composition that changed at almost every visit. Details of exposure are presented in Table 1

Active ingredient	**Visit 1 (D−30)**	**Visit 2 (D−25)**	**Visit 3 (D−21)**	**Visit 4 (D−17)**	**Visit 5 (D−11)**	**Visit 6 (D−7)**	**Visit 7 (D−3)**
Carbamazepine	–	–	✓	✓	✓	✓	✓
Celecoxib	✓	–	✓	✓	–	–	✓
Meloxicam	–	–	–	–	✓	–	✓
Diclofenac potassium	–	–	–	–	–	–	✓
Paracetamol	✓	✓	✓	✓	–	✓	✓
Triamcinolone	✓	✓	✓	✓	–	✓	✓
Gabapentin	✓	✓	–	–	–	–	–
Diazepam	✓	✓	✓	✓	–	–	–
Ranitidine	–	–	–	–	–	✓	✓
Vitamin B complex	✓	–	–	–	–	–	–

Given the exposure to multiple drugs within a period close to disease onset, identifying the drug most likely to have triggered the reaction became one of the main challenges in this case.

Past medical history included trigeminal neuralgia, diagnosed 30 days earlier by a primary care physician and regularly followed up at the same clinic since then. There was no history of surgery. There was no known history of drug or food allergy.

There was no history of diabetes mellitus. A random blood glucose of 163 mg/dL on the index day most likely represented reactive hyperglycemia due to acute physiological stress. HbA1c and fasting glucose were not measured.

A history of malignancy was denied by the patient and her family.

Family and social history. There was no relevant family history.

Clinical Findings

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General condition was weak, GCS E4V5M6. Blood pressure 120/80 mmHg, pulse rate 116 beats/min, respiratory rate 20 breaths/min, axillary temperature 37.1 °C, and oxygen saturation 97% on room air.

Head and neck. Conjunctivae not anemic, sclerae not icteric, bilateral conjunctival injection, bilateral palpebral edema, and bilateral yellowish-white discharge. Pharyngeal hyperemia. Erosions on the labial mucosa covered with blackish-red crusts. No lymph node enlargement.

Thorax, abdomen, and extremities were within normal limits; warm acral extremities, capillary refill time of less than two seconds, and no leg edema.

Dermatological status. On the facial region, trunk, and bilateral upper and lower extremities, there were multiple, well-demarcated dusky red macules and patches as well as purpura, of varying shapes and sizes. At some sites, there were multiple flaccid, round, well-demarcated bullae filled with serous fluid, measuring 0.5–1 cm in diameter. Nikolsky sign was positive. There were also erosions with an erythematous base resulting from ruptured bullae, geographic in shape, well-demarcated, measuring 0.5 × 1 cm to 1 × 2 cm. On the labial, genital, and perianal mucosa, there were dusky red macules and patches with multiple erosions, partly covered with blackish-red crusts (Figures 1-3)



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(Figure 1) Facial region showing multiple macules and *dusky red patches* ( ), erosions with an erythematous base, discharge in both eyes ( ), and blackish-red crusts in the oral cavity ( )



(Figure 2) Truncal region showing multiple macules and *dusky red patches* ( ), erosions with an erythematous base ( ), Nikolsky sign (+) ( )

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(Figure 3) Extremity region showing multiple macules and *dusky red patches* ( )

The extent of epidermal detachment was estimated at 23.5% using the rule of nines; thus, this case met the criteria for SJS–TEN overlap (10–30%).

Diagnostic assessment

Laboratory examination revealed an elevated monocyte differential count of 16% (0-9%), an elevated NLR of 4.19 (0.00-3.13), and mild lymphopenia with an absolute lymphocyte count of 1.30 $\times 10^3/mm^3$, whereas other hematological parameters were within normal limits. Serum electrolyte examination showed mild hyponatremia of 132.3 mmol/L (135-155 mmol/L), whereas other electrolyte levels were within normal limits. Liver function tests showed elevated SGOT of 115 U/L (<31 U/L) and SGPT of 69 U/L (0-31 U/L); however, further follow-up was not performed. Blood gas analysis showed mild respiratory alkalosis with partial metabolic compensation, with pH 7.49 (7.35-7.45), pCO2 27 mmHg (35-45 mmHg), HCO3- 20.6 mmol/L (21-28), and pO2 67 mmHg (80-100 mmHg). Radiological, histopathological, and microbiological examinations were not performed.

ALDEN scoring was performed to identify the drug suspected of being the culprit in this patient. ALDEN scoring identified 2 drugs with the same score, both falling into the Probable category, namely carbamazepine and meloxicam.

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Drug	**Latency (days)**	**C1**	**C2**	**C3**	**C4**	**C5**	**C6**	**Total**	**Causality category**
Carbamazepine	**21**	**+3**	**0**	**0**	**0**	**+3**	**−1**	**5**	**Probable**
Meloxicam	**11**	**+3**	**0**	**0**	**0**	**+3**	**−1**	**5**	**Probable**
Celecoxib	30	+2	0	0	0	+2	−1	3	Possible
Triamcinolone	30	+2	0	0	0	+1	−1	2	Possible
Paracetamol	30	+2	0	0	0	+1	−1	2	Possible
Diclofenac potassium	3	+1	0	0	0	+1	−1	1	Unlikely
Ranitidine	7	+3	0	0	0	−1	−1	1	Unlikely
Diazepam	30	+2	0	0	0	−1	−1	0	Unlikely
Vitamin B1, B6, B12	30	+2	0	0	0	−1	−1	0	Unlikely
Gabapentin	30	+2	−3	0	0	+1	−1	−1	Very unlikely
Dexamethasone injection	0	−3	0	0	0	−1	−1	−5	Very unlikely (excluded)
Diphenhydramine injection	0	−3	0	0	0	0	−1	−4	Very unlikely (excluded)

ALDEN components. C1, delay from initial drug intake to onset; C2, drug present in the body on the index day; C3, prechallenge or rechallenge; C4, dechallenge; C5, drug notoriety according to the EuroSCAR classification; C6, other possible causes. Causality categories: score less than 0, very unlikely; 0 to 1, unlikely; 2 to 3, possible; 4 to 5, probable; 6 or more, very probable.

The RegiSCAR score was also calculated to exclude a possible overlap with DRESS (*Drug-induced Hypersensitivity Syndrome*) because of the presence of transaminitis; the score obtained was -2, which excluded a diagnosis of DRESS in this patient.

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The diagnosis in this patient was *drug-induced Stevens–Johnson Syndrome–Toxic Epidermal Necrolysis overlap*, with carbamazepine and meloxicam as the suspected culprits. The patient's SCORTEN was 2, with a mortality rate of 12.1%.

Therapeutic Intervention

After the diagnosis of SJS–TEN overlap was established, all drugs previously prescribed by the general practitioner were discontinued. The patient received intravenous fluid therapy with 0.9% NaCl, diphenhydramine, ranitidine, and intravenous methylprednisolone. Skin care consisted of 0.9% NaCl compresses for 15 minutes three times daily, followed by application of fusidic acid ointment.

Mucosal involvement was managed specifically. The patient received eye drops containing sodium chloride and potassium chloride three times daily in both eyes, as well as triamcinolone acetonide ointment for the lip lesions. Subsequently, care also included topical skin preparations, supplementation with vitamin D3, albumin, and zinc, and symptomatic therapy with cetirizine.

On the sixth day of hospitalization, the patient began receiving regular NaCl gargling and NaCl nebulization. Supportive therapy and care of skin and mucosal lesions were continued consistently throughout the hospital stay.

Methylprednisolone was administered at a dose of 125 mg intravenously during the initial phase of hospitalization and was then reduced to 62.5 mg intravenously from day eight onward as part of the tapering process. Wound care, mucosal therapy, and supportive therapy were continued throughout the recovery process.

Analgesia, nutrition, and interdisciplinary consultation

Systemic analgesia was not administered. This decision was made because the patient herself wished to avoid analgesic drugs for the time being. Lesional pain was managed non-pharmacologically with 0.9% NaCl compresses and topical therapy, and according to the patient, the pain decreased as treatment progressed.

Nutritional support was provided as an oral liquid diet consisting of fruit juice and milk, without nasogastric tube placement. Serum albumin remained normal on initial examination.

Ophthalmological consultation was not performed. This was based on the rapid

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improvement of ocular signs with supportive therapy: by day 7, the patient was able to open both eyes, discharge was no longer present, conjunctival injection had subsided, and there were no complaints of visual disturbance. The patient was given lubricating eye drops from the first day of hospitalization, after the gentamicin eye drops administered during the emergency department visit were discontinued.

Clinical Course and Outcomes

Lesion progression ceased on day 1 from onset, i.e., within 24 hours after all suspected drugs were discontinued and methylprednisolone therapy was initiated. Some lesions began to dry on day 7, and this finding served as the basis for tapering the methylprednisolone dose. Drying of the lesions became more extensive by day 9.

On hospital day 11, corresponding to day 10 from onset, there was significant clinical improvement. The dusky red macules and patches had partly evolved into post-inflammatory hypopigmented and hyperpigmented macules, although several areas of erosion with an erythematous base covered with blackish crusts remained.

Ocular involvement improved with supportive therapy. By day 7, the patient was able to open both eyes, conjunctival discharge was no longer present, conjunctival injection had subsided, and there were no complaints of visual disturbance.

The genital and perianal mucosa had healed by the time of discharge, with no residual erosions or signs of vulvovaginal adhesions.

The patient was discharged on hospital day 11. Discharge medications included oral methylprednisolone 16 mg twice daily, cetirizine 10 mg once daily at night, zinc 20 mg once daily, mecobalamin, vitamin D3 5,000 IU once daily, and albumin supplementation. The patient also continued wound care with 0.9% NaCl compresses, application of fusidic acid to eroded areas, triamcinolone ointment for the lips, and eye drops. The patient was advised to attend follow-up at the Dermatology and Venereology Outpatient Clinic.

No adverse events were recorded during hospitalization, including signs of secondary infection. The patient received a written note from the physician regarding drugs to be avoided in future treatment.

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(Figure 4) Evaluation on day 11 showing improvement of the lesions. Macules and patches of post-inflammatory hypopigmentation and hyperpigmentation, with some erosions still appearing erythematous and covered with blackish crusts

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DISCUSSION

We report a 62-year-old woman with an acute mucocutaneous eruption that appeared in the early morning hours and progressed within hours, consisting of dusky red macules and patches and purpura accompanied by flaccid bullae with a positive Nikolsky sign, and involving three mucosal areas, namely ocular, oral, and genital and perianal. An epidermal detachment of 23.5% placed this case in the SJS–TEN overlap category. During the preceding 30 days, the patient had received seven prescriptions of compounded preparations for trigeminal neuralgia, with a composition that changed at almost every visit, including carbamazepine, three NSAIDs, paracetamol, triamcinolone, gabapentin, and diazepam. The patient's SCORTEN was 2, with a predicted mortality of 12.1%. All suspected drugs were discontinued, and the patient received intravenous methylprednisolone along with wound and mucosal care. Lesion progression ceased within 24 hours, re-epithelialization began on day 7, and the patient was discharged on hospital day 11 with lesions that had partly evolved into post-inflammatory hypopigmented and hyperpigmented macules.

Multi-ingredient compounded preparations have indeed been listed among the causative agents of SJS/TEN [2], but reports presenting such exposure history in visit-by-visit detail remain very limited. In this case, seven prescriptions within 30 days with constantly changing compositions created a situation in which at least ten active ingredients had been taken within the relevant time frame, some of which were discontinued and then restarted. We documented this as a visit-by-visit exposure matrix so that the causality assessment can be reproduced by readers.

Causality assessment with the ALDEN algorithm yielded 2 drugs with an identical ALDEN score of 5 (probable category), namely carbamazepine and meloxicam. Carbamazepine was started 21 days before onset, falling precisely within the highest-risk window, i.e., the first three weeks of drug administration and the first eight weeks of therapy [2]. Anticonvulsants are the second most common causative class after antibiotics, accounting for 18.5% of 379 reported culprit drugs [3], and carbamazepine is the most commonly prescribed and also the most frequently implicated anticonvulsant [2]. On the other hand, meloxicam is an oxicam-derived NSAID, the subclass that, among all NSAIDs, shows the strongest association with this disease [2], with a latency of 11 days

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that is also compatible. By comparison, paracetamol, which was taken repeatedly over 30 days, obtained an ALDEN score of 2, and its association has consistently been reported to be weaker [2].

Therefore, we could not establish a single culprit in this case, because 2 drugs in the patient's compounded preparations had the same ALDEN score. This may be explained by the fact that determination of the culprit drug based solely on review of the drug history is indeed prone to inaccuracy in the setting of polypharmacy, an incomplete history, or inaccessible medical records, whereas drug provocation testing, the gold standard, is contraindicated in SJS/TEN [6]. The consequence of the difficulty in establishing causality in this case is that the patient must avoid drugs that are in fact safe, or conversely may be re-exposed to the drug that is the true culprit [6].

SJS and TEN are severe mucocutaneous reactions characterized by necrosis and detachment of the epidermis and mucosal epithelium, and are classified as type IVc hypersensitivity reactions mediated mainly by T cells [9]. Their incidence is approximately 1 to 2 cases per million population per year [8], with other estimates citing 0.94 to 9.2 cases per million [2]. The two are distinguished by the maximum extent of epidermal detachment, namely less than 10% for SJS, 10–30% for SJS–TEN overlap, and more than 30% for TEN [1,8,9]. Mortality increases with lesion extent, averaging 1–5% in SJS and 25–35% in TEN according to the Indonesian practice reference [9], whereas a review of 1,059 case reports recorded 6.3% in SJS, 21.1% in overlap, and 24.4% in TEN [3]. Mucosal involvement is a prominent feature and was reported in 842 of 1,059 cases (79.5%), including the oropharynx, conjunctiva, genitalia, and anus; interestingly, it was the SJS–TEN overlap group that showed the highest rate at 92.1%, compared with TEN, which had the lowest (73.0%) [3]. Visceral organ involvement was reported in 19.8% of cases, being higher in the overlap group than in SJS (23.7% vs. 14.7%; $p = 0.007$) [3]. Our patient showed involvement of three mucosal sites and elevated transaminases; thus, her clinical picture was consistent with the profile of the SJS-TEN overlap group.

The diagnosis is established based on history taking, physical examination, supporting investigations, and categorization according to the extent of detachment. Suspected drugs are those taken up to eight weeks before onset, most commonly within 4 to 28 days before symptom onset [9]. Both candidates in our case fell within this range, namely carbamazepine at day 21 and

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meloxicam at day 11. Differential diagnoses that need to be excluded include generalized bullous fixed drug eruption, staphylococcal scalded skin syndrome, acute generalized exanthematous pustulosis, pemphigus vulgaris, and erythema multiforme major. DRESS was specifically considered because of the transaminitis in our case, given that carbamazepine is one of the classic triggers of DRESS. However, assessment with the RegiSCAR score yielded a score of −2, allowing us to exclude a possible overlap syndrome between DRESS and SJS/TEN, given that overlap syndromes between DRESS and SJS/TEN have been reported [1].

Supporting investigations serve to support the diagnosis, calculate prognostic scores, and detect organ involvement. In our case, there was absolute lymphopenia with a lymphocyte count of $1.30 \times 10^3/\mu L$, an elevated neutrophil-to-lymphocyte ratio of 4.19, and absence of eosinophilia, which helped distinguish this case from DRESS. Elevated transaminases indicated hepatic involvement, whereas blood gas analysis showed respiratory alkalosis with hypoxemia on room air. Skin, blood, and urine cultures are recommended as part of vigilance against infection [9], but were not performed in this case.

SCORTEN was calculated within the first 24 hours in accordance with a strong guideline recommendation [8] and is recommended to be re-evaluated on day 3 of hospitalization [9]. A meta-analysis of 45 studies involving 3,467 patients confirmed that all seven SCORTEN variables remain valid and independent predictors of mortality, with serum urea showing the strongest association (OR 6.52; 95% CI 4.80–8.86), followed by bicarbonate (OR 5.78; 95% CI 3.77–8.85) [1].

HLA-B*15:02 typing could not be performed in this case, even though its association with antiepileptic-induced SJS/TEN is very strong, with an odds ratio of 24.51 (95% CI 14.56–41.27) in a meta-analysis of 21 studies, a sensitivity of 67–100%, and a specificity of 73–100% for carbamazepine-induced SJS/TEN, and it has been confirmed in the Javanese and Sundanese populations of Indonesia [5]. The prevalence of antiepileptic-associated SJS is also higher in Asia (24.84%) than in the Americas (11.20%) and Europe (11.70%) [4], and screening for this allele is recommended for Asian populations who are to receive carbamazepine [9].

Withdrawal of the culprit drug is the most important intervention, and discontinuation of all non-life-saving drugs taken within the preceding eight weeks is recommended [9]. In our case,

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lesion progression ceased within 24 hours of withdrawal.

Early management consists of systemic therapy with corticosteroids, and cyclosporine is given only when corticosteroids are contraindicated [8]. Short-term high-dose corticosteroids in the acute phase have been reported to reduce mortality without increasing the risk of sepsis and without impairing re-epithelialization, with the regimen continued for 7–10 days and then tapered gradually [9]. The duration of administration in our patient was within this range.

Prophylactic systemic antibiotics are not routinely recommended [9] and are considered only in patients with a SCORTEN of 3 or more, exfoliation exceeding 50%, or immunocompromised status [2]; none of these three criteria were met in our patient, and therefore systemic antibiotics were not administered. Extensive debridement of necrotic epidermis is also not recommended [9] and was not performed. Prophylactic anticoagulation is recommended in the acute phase to prevent thromboembolic complications in patients with prolonged bed rest [9], but was not administered in this case.

The most common complication is sepsis leading to multiple organ failure, with skin and pulmonary infections being the most frequent sources of infection [2,9]. Hyperglycemia warrants vigilance because it causes microangiopathy and impairs skin tissue healing, thereby increasing the risk of ulceration and infection [2]; a mixed-methods review of 26 studies with 1,067 patients showed that SJS/TEN sequelae affect patients' physical and psychological health, employment, relationships, social life, and finances, so the disease needs to be treated as both an acute and a chronic condition [7]. One study reported that screening of SJS/TEN survivors revealed depression in 53.3% of participants, anxiety in 43.3%, and post-traumatic stress disorder in 19.5% [7]. Fear or avoidance of medications is also common among patients [7].

Therefore, the administration of multi-ingredient compounded preparations causes two disadvantages at once. The first is probabilistic, namely an increased likelihood of exposure to a triggering drug. The second is the permanent obscuring of culprit identification, because drug provocation testing, the gold standard, is contraindicated [6]. Prescribing compounded preparations to elderly patients should be reconsidered, especially when they contain high-risk drugs. Structured causality assessment using ALDEN and detailed documentation of exposure are minimum

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requirements before a drug is declared the culprit and recorded as a lifelong contraindication for the patient.

CONCLUSION

Stevens–Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are severe mucocutaneous reactions characterized by necrosis and detachment of the epidermis and mucosal epithelium, and constitute a medical emergency with a considerably high mortality rate. Most cases are triggered by drug intake. The diagnosis is established based on history taking, physical examination, supporting investigations, and categorization according to the extent of detachment. Suspected drugs are those taken up to eight weeks before onset, most commonly within 4 to 28 days before symptom onset.

Early recognition of symptoms, prompt withdrawal of the suspected culprit drug, and provision of adequate supportive therapy were the key determinants of successful management in this case. In non-severe cases, the prognosis is fairly good, but vigilance is required for complications that may worsen the prognosis.

We report a case of SJS–TEN overlap in a 62-year-old woman that developed after exposure to multi-ingredient compounded preparations prescribed repeatedly over 30 days for her pain due to trigeminal neuralgia. Causality assessment with the ALDEN algorithm applied to all active ingredients placed carbamazepine and meloxicam in the probable category with identical scores; therefore, a single culprit could not be established. Prescribing multi-ingredient compounded preparations to elderly patients should be reconsidered, particularly when they contain drugs classified as high-risk, because this practice increases the likelihood of exposure while also obscuring identification of the culprit.

PATIENT PERSPECTIVE

The patient stated that the pain and stinging of the lesions decreased as treatment progressed compared with when she first presented to the emergency department, such that by the end of

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hospitalization, the pain from trigeminal neuralgia was in fact more bothersome. On initial presentation to the emergency department, the patient had difficulty opening her eyes and difficulty eating and drinking, but at discharge she was able to eat, drink, and open her eyes. The patient also stated that she felt helped by receiving a written note from the physician regarding drugs to be avoided, and hoped that the note would serve as important information when she seeks treatment from other physicians so that similar complaints would not recur.

INFORMED CONSENT

Written consent for publication, including the use of clinical photographs, has been obtained from the patient. The written consent was signed and provided by the patient

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