**UK guidelines for the management of Stevens-Johnson syndrome/toxic epidermal necrolysis 2016**


| Initial assessment on presentation | • Take a detailed history from the patient and/or relatives  
• Perform a full physical examination, including baseline body weight and record the vital signs, including oxygen saturation  
• Order a set of investigations: FBC, U&E, LFT, glucose, magnesium, phosphate, bicarbonate, mycoplasma serology, CXR, skin biopsy and baseline body weight  
• Initiate a primary management plan:  
  1. establish peripheral venous access  
  2. if patient cannot maintain adequate nutrition orally, insert a nasogastric tube and institute nasogastric feeding  
  3. insert a urinary catheter if urogenital involvement is causing significant dysuria/retention (Strength of recommendation D (GPP)) |
| Determination of drug causality | • Identify causative agent and withdraw immediately (Strength of recommendation D) |
| Prognostic scoring | • Calculate SCORTEN within the first 24 hours (Strength of recommendation C) |
| Care setting | • A multi-disciplinary team should be convened, co-ordinated by a specialist in skin failure, usually dermatology and/or plastic surgery, and including clinicians from intensive care, ophthalmology and skin-care nursing  
• Patients with greater than 10% BSA epidermal loss should be admitted without delay to a Burn Centre or ICU with experience of treating patients with SJS/TEN and facilities to manage the logistics of extensive skin loss wound care  
• Patients must be barrier-nursed in a side room controlled for humidity, on a pressure-relieving mattress with the ambient temperature raised to between 25° and 28°C (Strength of recommendation D (GPP)) |
| Skin management regimen 1 | • Employ strict barrier nursing to reduce nosocomial infections  
• Take swabs for bacterial and candidal culture from three areas of lesional skin, particularly sloughy or crusted areas, on alternate days throughout the acute phase  
• Administer systemic antibiotics only if there are clinical signs of infection (Strength of recommendation D (GPP)) |
| Applicable to all patients in all settings | **Institute a conservative approach in all patients as follows:**  
• Regularly cleanse wounds and intact skin by irrigating gently using warmed sterile water, saline or an antimicrobial such as chlorhexidine (1/5000)  
• Apply a greasy emollient, such as 50% white soft paraffin with 50% liquid paraffin (50/50 WSP/LP), over the whole epidermis, including denuded areas  
• Apply a topical antimicrobial agent to sloughy areas only (choice should be guided by local microbiological advice). Consider Ag-containing products/dressings.  
• The detached, lesional epidermis may be left in situ to act as a biological dressing. Blisters should be decompressed by piercing and expression or aspiration of tissue fluid.  
• Apply non-adherent dressings to denuded dermis (suitable dressings include Mepitel® or Telfa®).  
• A secondary foam or burn dressing should be used to collect exudate (suitable dressings include Exu-Dry®).  

Consider transfer to a Burn Centre in patients with TEN (>30% BSA epidermal loss) and evidence of the following: clinical deterioration, extension of epidermal detachment, sub-epidermal pus, local sepsis, wound conversion and/or delayed healing. In a Burn Centre conservative measures may be supplemented with a surgical approach.  
• Remove necrotic/loose infected epidermis and clean wounds using a topical antimicrobial agent (e.g. betadine or chlorhexidine) under general anaesthetic  
• Consider debridment with Versajet™  
• Physiological closure with Biobrane/ allograft/xenograft skin in patients with early presentation involving non infected and large confluent areas (Strength of recommendation D (GPP)) |
| Skin management regimen 2 | **This may involve a conservative and/or surgical approach based on the specialist multi-disciplinary team’s daily review of the individual needs of the patient** |
| Fluid replacement regimen | • Site venous lines through non-lesional skin, whenever possible, and change peripheral venous cannulas every 48 hours  
• Monitor fluid balance carefully: catheterize if appropriate/necessary  
• Establish adequate intravenous fluid replacement initially. Fluid replacement can be guided by urine output and other endpoint measurements. Individualized fluid management should be adjusted on a daily basis.  
• With improvement of SJS/TEN mouth involvement, oral administration of fluids should be progressively increased (Strength of recommendation D) |
| Nutrition regimen | · Provide continuous enteral nutrition throughout the acute phase  
|                   | · Deliver up to 20 to 25 kcal/kg/day during the early, catabolic phase and 25 to 30 kcal/kg/day during the anabolic, recovery phase  
| (Strength of recommendation C) |
| Analgesia | · Use a patient appropriate validated pain tool to assess pain in all conscious patients at least once a day  
|           | · Patients should receive adequate analgesia to ensure comfort at rest, with the addition of supplementary opiates, as required  
|           | · Additional analgesia may be needed to address increased pain associated with patient handling, re-positioning and dressing changes  
| (Strength of recommendation D (GPP)) |
| Supportive Therapeutic Measures | · Immobile patients should receive low molecular weight heparin  
|           | · Patients in whom enteral nutrition cannot be established should receive a proton pump inhibitor to reduce the risk of stress-related gastro-intestinal ulceration  
|           | · Neutropenic patients may benefit from recombinant human G-CSF  
| (Strength of recommendation C) |
| Treatment of eye involvement | · Daily ophthalmological review is necessary during the acute illness  
|           | · Apply an ocular lubricant (e.g. non-preserved hyaluronate or carmellose eye drops) every two hours through the acute illness  
|           | · Ocular hygiene must be carried out each day by an ophthalmologist or ophthalmic-trained nurse  
|           | · Application of topical corticosteroid drops (e.g. non-preserved dexamethasone 0.1% twice a day) may reduce ocular surface damage  
|           | · Administer a broad-spectrum topical antibiotic as prophylaxis (e.g. moxifloxacin drops four times a day) in the presence of corneal fluorescein staining or frank ulceration  
|           | · In the unconscious patient, prevention of corneal exposure is essential  
| (Strength of recommendation D (GPP)) |
| Treatment of mouth involvement | · Daily oral review is necessary during the acute illness  
|           | · Apply white soft paraffin ointment to the lips every two hours through the acute illness  
|           | · Clean the mouth daily with warm saline mouthwashes or an oral sponge  
|           | · Use an anti-inflammatory oral rinse or spray containing benzydamine hydrochloride every three hours, particularly before eating  
|           | · Use an anti-septic oral rinse containing chlorhexidine twice a day  
|           | · Use a potent topical corticosteroid mouthwash (e.g. betamethasone sodium phosphate) four times a day  
| (Strength of recommendation D (GPP)) |
| Treatment of urogenital involvement | · Daily urogenital review is necessary during the acute illness  
|           | · Apply white soft paraffin ointment to the urogenital skin and mucosae every four hours through the acute illness  
|           | · Use a potent topical corticosteroid ointment once a day to the involved, but non-eroded, surfaces  
|           | · Use a silicone dressing (e.g. Mepitel™) to eroded areas  
| (Strength of recommendation D (GPP)) |
| Treatment of airway involvement | · Respiratory symptoms and hypoxaemia on admission should prompt early discussion with an intensivist and rapid transfer to an ICU or Burn Centre, where fibre-optic bronchoscopy should be undertaken  
| (Strength of recommendation D (GPP)) |
| Active therapy | · If active therapy is instituted it should be given, ideally, under the supervision of a specialist skin failure MDT in the context of clinical research and/or case registry  
| (Strength of recommendation D) |
| Discharge and follow-up | · Give the patient written information about drug(s) to avoid  
|           | · Encourage the patient to wear a MedicAlert bracelet  
|           | · Drug allergy should be documented in the patient’s notes; all doctors involved in the patient’s care should be informed  
|           | · Report the episode to the national pharmacovigilance authorities  
|           | · Organize an out-patient clinic appointment, and if required an ophthalmology out-patient appointment, within a few weeks of discharge  
|           | · Refer for review to unit with appropriate sub-speciality interest  
| (Strength of recommendation D (GPP)) |
| Diagnostic testing | · Routine drug hypersensitivity testing is not recommended following an episode of SJS/TEN.  
|           | · Seek specialist advice on hypersensitivity testing where:  
|           | 1. the culprit drug is not known or  
|           | 2. medication avoidance is detrimental to the individual or  
|           | 3. accidental exposure is possible  
| (Strength of recommendation D (GPP)) |