# NSW Government-Sponsored Clinical Trial: Management of Dermatology Conditions by Community Pharmacists

Clinical Practice Guidelines for Herpes Zoster (Shingles); Impetigo (School Sores); Mild to Moderate Atopic Dermatitis and Acute exacerbations of Mild Plaque Psoriasis

Approved 22 November 2024 V3.0



# Herpes Zoster (Shingles) | Clinical practice guideline (1/3)

#### **Treatment Algorithm** 1. Arriving at a diagnosis for Herpes Zoster (Shingles)

Age of the patient		
Aged 18 years and over	Aged under 18 years of age	Refer GP
$\checkmark$		
Does the patient present with adequate clinical presentation	tions of Herpes Zoster (Shingles)?	
	hours before the localised, characteristic vesicular rash becomes evident:	No
Localised nerve pain (usually described as stabbing, pr		
<ul> <li>Lethargy, fever, headache</li> </ul>		
<ul> <li>Abnormal skin sensations such as burning, itching, hyp</li> </ul>	peresthesia and/or paraesthesia	Referral to ED in settings
<ul> <li>Photophobia (approximately 80% of cases).</li> </ul>		and situations where GP
2. Rash:		review is not available
	d distinct anterior and posterior midline cut-offs (satellite lesions may also appear)	within the appropriate
	he nerve line, becoming pustular, before scabbing and crusting over between 7-10 days	timeline. This will be
	hthalmic) and lumbar/sacral sensory nerve supply regions	decided by the
	present with a blistering rash around the eye/eyelid with associated pain, swelling and redness. Urgent referral to a	pharmacist during the
medical practitioner is required (more details and refe		consultation based on
	nsay Hunt Syndrome) symptoms will include earache, blistering in and around the ear canal, with or without external	the assessed patient
ear and facial paralysis.		needs.
↓ Yes		Referral is required
Has the patient history and examination of the rash confi	rmed the appropriateness for provisional diagnosis?	where patient presents
	he patient to assess the safety and appropriateness of any recommendations and medicines for the patient, including	>72-hours from the
-	cy of symptoms, nature of rash (distribution, appearance, number of lesions), onset and duration of symptoms,	onset of symptoms as
	s (VZV) infection, underlying medical conditions (e.g. renal impairment), current medications, medications and other	efficacy of antiviral
strategies tried to treat current symptoms, drug allergies/adverse		medication is limited.
	characteristics and location, as well as signs of complications for diagnosis of HZ and exclusion of differential	
conditions.		
<ul> <li>Laboratory confirmation is generally not required for type</li> </ul>	pical presentations and uncomplicated cases of HZ.	
	Ves	
Prov	visional diagnosis for Herpes Zoster (Shingles)	
Exclusion from trial-     Immediate ED or GP	Treat & Referral to GP Provide conservative	
refer to medical care	- conservative treatment as required treatment	2
	·	

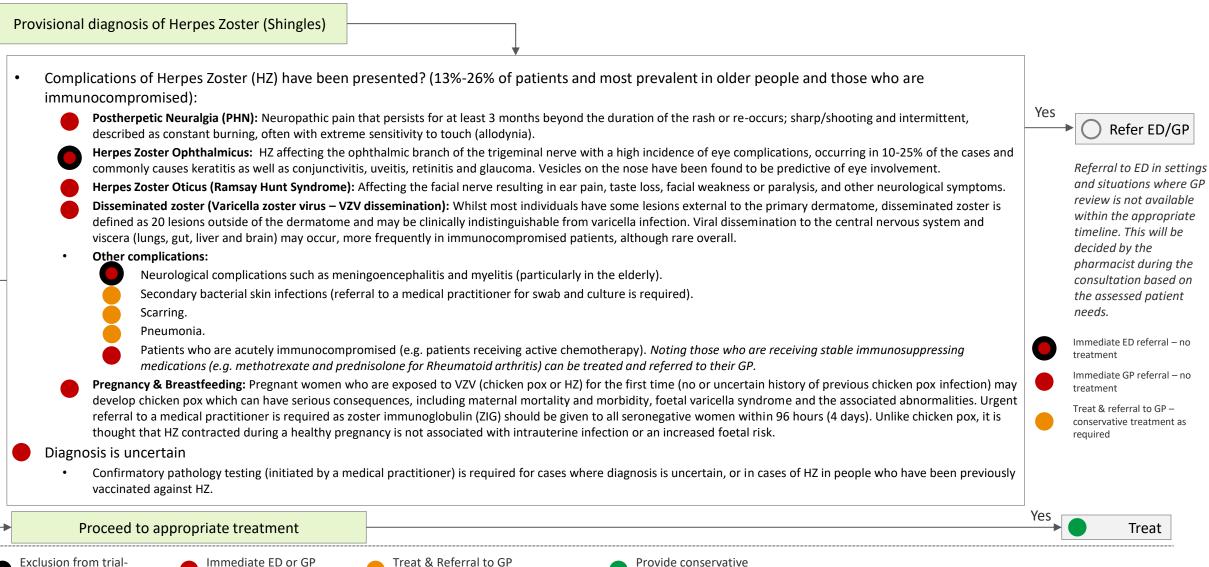
### Herpes Zoster (Shingles) | Clinical practice guideline (2/3)

Treatment Algorithm 2. Identifying primers for differential diagnosis and referrals

referral – no treatment

No

refer to medical care



treatment

conservative treatment as required

3

### Herpes Zoster (Shingles) | Clinical practice guideline (3/3)

Proceed to appropriate management and treatment plan	
Provide <b>supportive management</b> with education and advice regarding care for lesions and transmission	<ul> <li>Education and advice regarding care for lesions (use of dressings, cleaning and appropriate clothing).</li> <li>Education and advice regarding transmission precautions in accordance with the NSW Health Shingles Fact Sheet.</li> </ul>
Provide pharmacotherapy – antiviral therapy and analgesia in accordance with the Therapeutic Guidelines if required and appropriate for the patient <sup>1</sup> : 1) Valaciclovir 1g (2x500mg) PO q8h for 7 days 1) Famciclovir 500mg PO q8h for 7 days 2) Aciclovir 800mg PO 5 times daily for 7 days	<ul> <li>Antiviral treatment in accordance with Therapeutic Guidelines, to reduce acute pain, duration of the rash, viral shedding and ocular complications, if commenced within 72 hours of the first appearance of the rash. Antiviral therapy is not indicated in all patients – it is indicated for the following groups:         <ul> <li>Immunocompetent adults who present within 72 hours of the onset of the rash.</li> <li>All immunocompromised patients (including those with a HIV infection) regardless of the time elapsed since rash onset. <i>Note these patients are referred to their GP in the trial</i>.</li> <li>Patient with Zoster Ophthalmicus, regardless of the time lapsed from rash onset. <i>Note these patients are referred to ED in the trial</i>.</li> <li>Analgesia for mild nociceptive shingles pain in accordance with the Therapeutic Guidelines (oral paracetamol or nonsteroidal anti-inflammatory drugs – NSAIDs).</li> </ul> </li> <li>Note that patients reporting neuropathic pain or moderate to severe nociceptive pain should be referred to a medical practitioner for review.</li> </ul>
Confirm management is appropriate <b>and state specific</b> <b>public health legislation for disease notifications</b> <sup>2</sup> is followed, and communicate agreed management plan	<ul> <li>Consult the Therapeutic Guidelines, Australian Medicines Handbook, Australian Immunisation Handbook and other relevant references to confirm the treatment recommendation is appropriate, inc. for contraindications/precautions, drug interactions, pregnancy/lactation.</li> <li>Provide advice and counselling to patients on medicine use (e.g. dosing), managing side effects, HZ vaccinations, seeking further care, when to return to the pharmacist for clinical review.</li> </ul>
<ul> <li>Provide general advice around preventing transmission, vaccination and undertake clinical review</li> <li>1. Noting that dose adjustment is required for patients with documented severe renal impairment to the following dosing regimens:</li> <li>1) Valaciclovir: CrCl 15-30mL/minute, 1g twice daily; CrCl&lt;15mL/minute, 1g once daily.</li> </ul>	<ul> <li>Preventing Transmission: Infectious from 1-2 days prior to the onset of rash until vesicles have dried and scabbed (usually 5 days after the onset of the rash); high-risk contacts who have had significant contact (i.e. household contacts or where direct face-to-face contact exceeds 5 minutes/being within the same room for &gt;1hr), need to seek medical care as soon possible. Rash should be covered with appropriate dressing till no longer infectious and contact with pregnant women and immunocompromised people must be avoided.</li> <li>Advice on zoster vaccination: Vaccination is not indicated during an acute HZ episode or to treat PHN. People who have had a previous episode of HZ can be vaccinated against a recurrence, refer to the Australian Immunisation Handbook for HZ vaccination information and</li> </ul>
<ul> <li>1) Famciclovir: CrCl 30-50mL/minute, 250mg three times daily; CrCl 10-30 mL/minute, 250mg once daily.</li> <li>2) Aciclovir: CrCl 10-25mL/minute, 800mg q8h; CrCl &lt;10mL/minute, 800mg q12h</li> </ul>	<ul> <li>Undertake clinical reviews: Clinical review with the pharmacist is recommended 48-72 hours after the initial presentation to assess for progression of the rash, the clinical signs or symptoms of HZ, screening for complications, and adverse effects.</li> </ul>
<ol> <li>800mg q12h.</li> <li>Note that shingles is notifiable in ACT</li> </ol>	4

# Impetigo | Clinical practice guideline (1/3)

Treatment Algorithm 1. Arriving at a diagnosis for Impetigo

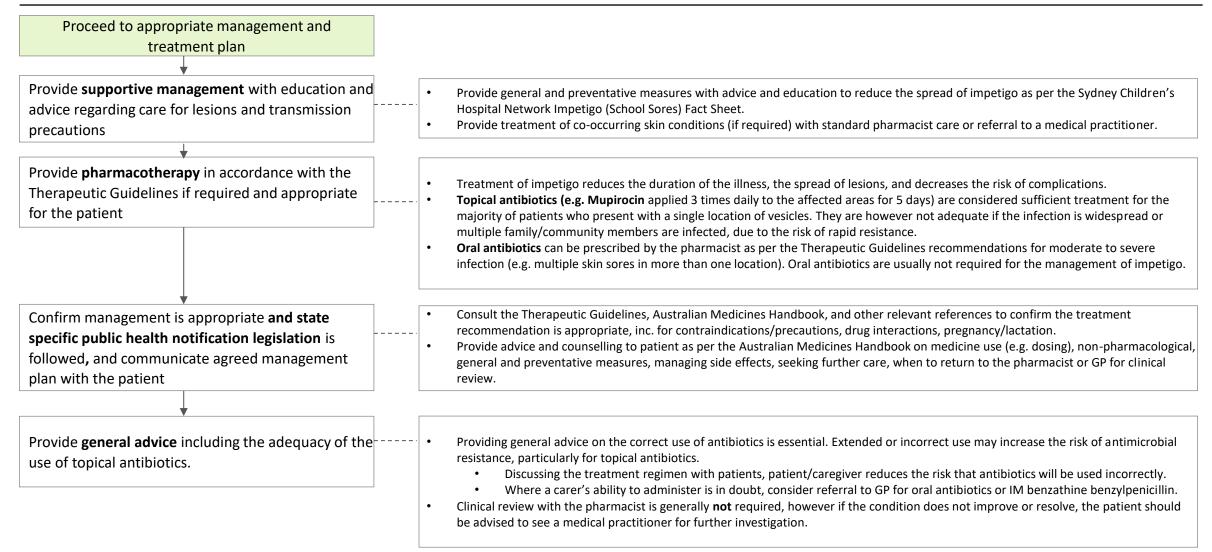
	Age of the patient			
Aged 12 months and over?		Aged under 12 months of age	Ref	fer GP
Does the patient present with ade	quate clinical presentation	ns of Impetigo (school sores)?		
<ol> <li>Primary or secondary clinical (most common) being a bact</li> <li>Presenting with non-bullous,</li> <li>Non-bullous (crusted): Ch Lesions with minimal or n the face and extremities ( within 2-4 weeks without</li> <li>Bullous: Present as irritat yellow/brown crust and e typically have scaling on t lymphadenopathy. Lesion</li> <li>Ecthyma: Characterised b thighs, legs, ankles and fe crowded conditions with gradually enlarge and sca</li> </ol>	form is present? With <b>P</b> cerial infection of a break bullous, or ecthyma (de naracterised by thin-walled pu o surrounding erythema. Mar (although any body part can b treatment and heal without ing, larger (diameter often >1 erosions. Tend to occur in moi he border of the bullae (colla smay resolve spontaneously by crusted sores with underlyi tet. People more likely to deve poor hygiene. Lymphadenopa r.	<b>imary form</b> being a direct bacterial infection of otherwise healthy skin, and <b>se</b> in the skin from trauma or pruritic conditions (impetiginisation). ep impetigo) clinical symptoms? stules or vesicles that may be itchy, usually not painful, rupture quickly and progress to honey start with a single vesicle that coalesces with others, often self-inoculation leads to multiple e affected). Patients are generally well, may have regional lymphadenopathy. Lesions may res	P-coloured crusts. esions, particularly on olve spontaneously ress to a thin, flat remities. Lesions ing fever, malaise and ting the buttocks, o and people living in ough they may	urther in
<ul><li>dermatophytosis, candidiasis, eczema</li><li>Patient history: Gather sufficient pati</li></ul>	, scabies, herpes zoster, atop ent history to assess the safe	o co-occur with other common skin conditions including contact dermatitis, thermal burns, for c dermatitis, varicella or molluscum contagiosum. y and appropriateness of recommendations and medicines for the patient, including patient a r recent travel to a place where impetigo is endemic (high rate of acute rheumatic fever with	ge, weight, pregnancy	
		Yes		
		· · · · · · · · · · · · · · · · · · ·		
		Provisional diagnosis for Impetigo		
	nediate ED or GP erral – no treatment	Treat & Referral to GP - conservative treatment as required Provide conservative treatment		5

# Impetigo | Clinical practice guideline (2/3)

**Treatment Algorithm** 2. Identifying primers for differential diagnosis and referrals

Pr	Torres Strait Islander to potentially access additional treatment, further details to be or stakeholder engagement and input from the NSW Ministry of Health.	, 0
• Com	<ul> <li>plications of Impetigo have been presented or clinical presentations that warrants further investigations?</li> <li>Patient in an endemic community<sup>1</sup>: Patient who currently is or has recently resided in a community where impetigo is endemic and has additional risk factors for ARF/RHD – see Appendix A of this document.</li> <li>People at risk of acute rheumatic fever (ARF) and rheumatic heart disease (RHD)<sup>1</sup>: Patients presenting for treatment of impetigo within the clinical trial should be assessed on a case-by-case basis to determine the appropriate treatment pathway, whether a referral to a medical practitioner for intramuscular (IM) benzathine benzylpenicillin is required – see Appendix A of this document.</li> <li>Complications of Impetigo, particularly bullous and ecthyma: Lymphangitis, lymphadenitis, widespread infection, cellulitis, gangrene and bacteraemia,</li> </ul>	
	<ul> <li>permanent scarring.</li> <li>Presence of systemic symptoms (e.g. fever, food/drinking aversion in the child).</li> <li>Vesicles present in more than one location (e.g. Face plus arms) indicating moderate infection. Noting that multiple vesicles can be present in a single location (e.g. near the mouth).</li> <li>Complications arising from Group A Streptococcal skin infections: more likely within endemic settings including APSGN and chronic kidney disease, ARF, sepsis,</li> </ul>	Yes Refer ED/G
	<ul> <li>osteomyelitis.</li> <li>APSGN (Acute Poststreptococcal Glomerulonephritis): immune-mediated sequalae of nephritogenic strains of <i>S.pyogenes</i>. May occur within 2-3 weeks after skin or throat infection of Group A streptococcus bacteria, affect children aged between 12 months and 17 years most frequently, with common signs and symptoms including facial and orbital swelling, particularly upon walking, elevated blood pressures, proteinuria and macroscopic haematuria with dark brown urine, and lethargy, weakness and/or anorexia.</li> </ul>	Immediate ED referral – treatment
	• <b>ARF (Acute Rheumatic Fever)</b> : immune-mediated sequalae of <i>S.pyogenes</i> involving multiple systems and organs, including the heart, joints and central nervous system. May occur between 1 and 5 weeks post Streptococcal infection, and is common after recurrent Streptococcal infections, particularly pharyngitis and impetigo. May affect children aged 5 and 14 years more frequently, with clinical symptoms of sore and/or swollen joints, fever, increased resting heart rate facial or peripheral oedema, Sydenham chorea. Please see Appendix A of this document for an extract of those individuals at high risk of developing ARF.	Immediate GP referral - treatment Treat & referral to GP – conservative treatment required
	Symptoms have not resolved after the first course of antibiotic treatment, symptoms significantly or rapidly worsen, or if impetigo infection re-occurs frequently.	Yes
·	Proceed to appropriate treatment	Treat
Exclusion f	from trial- edical care Immediate ED or GP referral – no treatment - conservative treatment as required reatment as required reatment	6

# Impetigo | Clinical practice guideline (3/3)



# Appendix A

Individuals at high risk of developing Acute Rheumatic Fever (ARF)

Patient Group	Description of individuals
Individuals aged 40 years and under	<ul> <li>Aboriginal and Torres Strait Islander people residing in a rural or remote area, or living in a household affected by household overcrowding (&gt;2 people per bedroom) or of lower socioeconomic status.</li> <li>Māori and/or Pacific Islander person living in a household affected by overcrowding or socioeconomic disadvantage.</li> <li>People with a recent personal or family/household history of ARF or rheumatic heart disease (RHD).</li> </ul>
Additional risk factors for individuals aged <= 40 years (particularly 5 to 20 years)	<ul> <li>People living in a household affected by household overcrowding (&gt;2 people per bedroom) of lower socioeconomic status.</li> <li>People with current or recent residence (including frequent or recent travel to) in an area with a high rate of ARF (Australia or internationally) e.g. refugees and migrants from low-middle income countries, rural and remote communities.</li> </ul>

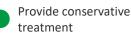
### Mild to Moderate Atopic Dermatitis | Clinical practice guideline (1/4)

Treatment Algorithm 1. Arriving at a diagnosis for Mild to Moderate Atopic Dermatitis

Age of the pati	ient			
		•		
Aged over 6 months and under 65 years	Aged u	inder 6 months or over 65 years of age		Refer GP
▼				
Known previous diagnosis of Ato	opic Dermatitis?		No	→ O Refer ED/GP
<ul> <li>practitioner?</li> <li>Clinical symptoms: Both pruritus and rash must be patches with the primary hallmark being itch. When of the knee (cubital and popliteal fossae).</li> </ul>	be present for a diagnosis of atopic hile AD can affect any area of skin, p hal references for location (head/ne	pic dermatitis (AD) which has already been diagnosed by a dermatitis, atopic dermatitis is characterised by dry, erythe patches typically occur on the face, inside of the elbow/arm eck, upper limbs, lower limbs, anterior trunk, back, genitals ness):	ematous n and back	<i>Referral type will be discussed further in the following section</i>
pregnancy and breastfeeding status, onset, duration, natur psychosocial wellbeing including sleep and learning, dietary	from the patient to assess the safety and re, location, severity and extent of patches y history and changes in diet, underlying a depression, explore to potential triggers o ines, drug allergies/adverse drug events.	provisional diagnosis? appropriateness of any recommendations for the patient, consider age s and plaques, response to any previous treatments, impacts on quality and associated medical conditions including asthma, allergic rhinitis, all or irritants, other factors including family history, environmental factors	y of life and lergic	
	Yes			

Provisional diagnosis for Mild to Moderate Atopic Dermatitis

Exclusion from trialrefer to medical care Immediate ED or GP referral – no treatment Treat & Referral to GP - conservative treatment as required

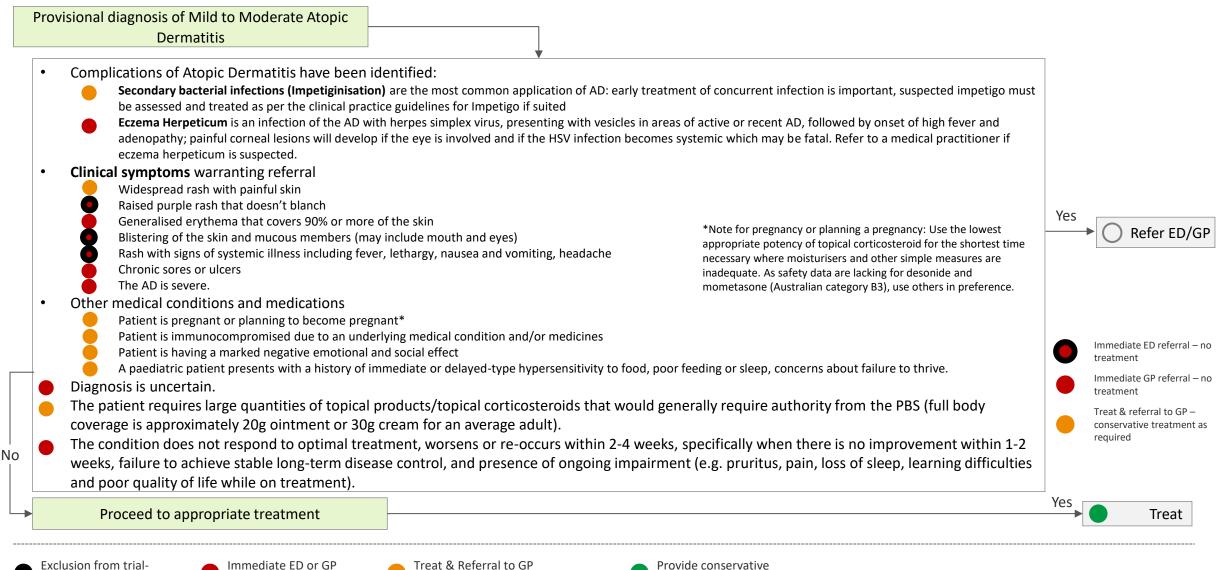


### Mild to Moderate Atopic Dermatitis | Clinical practice guideline (2/4)

Treatment Algorithm 2. Identifying primers for differential diagnosis and referrals

referral – no treatment

refer to medical care



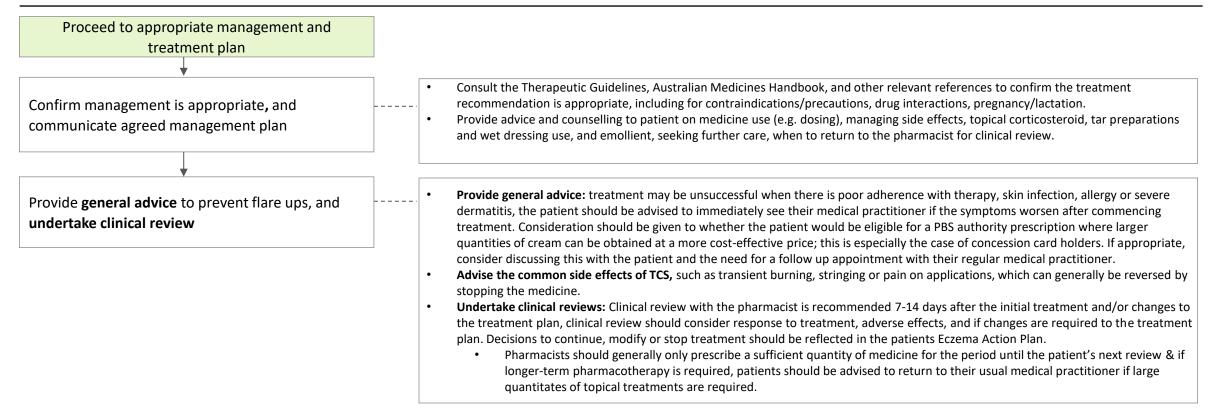
treatment

conservative treatment as required

### Mild to Moderate Atopic Dermatitis | Clinical practice guideline (3/4)

Proceed to appropriate management and treatment	
plan	
•	
Provide <b>supportive management</b> with education and advice regarding care	<ul> <li>Develop an eczema action plan based on Australasian Society of Clinical Immunology and Allergy Action Plan for Eczema template</li> <li>Advice regarding skin care and minimising aggravating factors as per the Therapeutic Guidelines and the Australian Medicines Handbool</li> </ul>
↓	
Provide <b>pharmacotherapy</b> – <b>topical corticosteroid</b> (TCS), tar preparations, and emollient in accordance with the Therapeutic Guidelines and previous treatment regimens if required and appropriate for the patient	<ul> <li>Topical corticosteroids as per the Therapeutic Guidelines and in line with the patient's previous treatment. Particularly for short-term supply where the patient is unable to attend their regular medical practitioner; noting that underuse of TCS is a common cause of previous treatment failure. Potent TCS should not be used for children aged 12 months of age or younger:         <ul> <li>Potent TCS: Class 3 containing betamethasone dipropionate 0.05%, betamethasone valerate 0.1%, methylprednisolone aceponate 0.1% or mometasone furoate 0.1%.</li> <li>Face: Hydrocortisone 1%, applied once daily until skin is clear.</li> <li>Trunk / limbs: Triamcinalone 0.02% ointment applied once daily.</li> <li>Finger and foot: Betamethasone dipropionate 0.05% ointment applied once daily, or betamethasone valerate 0.1% ointment applied once daily.</li> <li>Scalp: Betamethasone 0.1% ointment applied once daily, OR mometasone 0.1% lotion applied once daily.</li> </ul> </li> </ul>
	<ul> <li>Axillae and groin: Hydrocortisone 1% ointment applied once daily, OR Desonide 0.05% lotion applied once daily.</li> <li>Pimecrolimus 1% cream applied once or twice daily.</li> <li>Crisaborole 2% ointment applied BD for up to 4 weeks.</li> <li>Tar preparations 3-6% LPC + salicylic acid 2-6% in aqueous cream or ointment base, applied once daily at night.</li> </ul>
	<ul> <li>Applicable for all treatments, if symptoms have not resolved within 7 days, or become worse, the patient should seek further advice and management from their regular medical practitioner.</li> </ul>
	• For further information on management options, please refer to the Therapeutic Guidelines.
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#### Mild to Moderate Atopic Dermatitis | Clinical practice guideline (4/4)

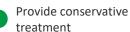


### Acute exacerbation of Mild Plaque Psoriasis | Clinical practice guideline (1/4)

Treatment Algorithm 1. Arriving at a diagnosis for exacerbations of mild plaque psoriasis

Age of the patient					
▼		•			
Aged 18 years and over		Aged under 18 years			Refer GP
Known previous diagnosis of Plaque	Psoriasis?			NO	Refer ED/GP
▼					
Does the patient present with adequate clinical presentation	tions of an acute exacerbation	of mild plaque psoriasis?			
• Clinical symptoms: To identify, assess and classify the	severity of an acute exacerbati	on of mild plaque psoriasis			
<ul> <li>In darker skin tones, plaques are generally darker or vio underestimated in people with darker skin tones</li> <li>Nail changes, including pitting, lifting of the nail (onycho to psoriasis from fungal nail infections</li> </ul>	let in colour, thicker, and with more c	bvious scale and itch, Psoriasis Ar			Referral type will be discussed further in the following section
• Severity: Determined and documented using visual re	ferences for location (Head/Ne	ck/Face, Upper limbs, Lower	limbs, Anterior trunk, Back, Ger	nitals;	
commonly found on the scalp, elbows, knees, buttock	s), the intensity of the rash, im	pact on quality of life, and ot	her subjective symptoms (e.g. if	tch and	
impact on sleepiness):					
E.g. psoriasis may be considered severe if it is having a	narked negative emotional and social	impact, extensively affecting the	body surface area and/or pruritus is le	eading to	
excoriation.					
Psoriasis affecting the face, scalp, genitals, palms, soles	or halls must always be referred to a	medical practitioner.			
Has the patient history and examination of the rash conf	irmed the appropriateness for	vrovisional diagnosis?			
Patient history: Sufficient information should be obtained from		<u> </u>	ations for the nationt consider age: n	regnancy	
and breastfeeding status; onset, duration, nature, location, seve				in eghaney	
comorbidities such as arthritis and common comorbidities such	•			nts;	
impacts to quality of life and psychosocial wellbeing; exposure to					
psoriasis; current, recently commenced or recently ceased medi	cines (including prescribed medicines	vitamins, herbs, other supplement	nts and over-the-counter medicines); f	family	
history of psoriasis; allergies/adverse drug effects.					
Examination of the clinical features – characterised by erythem	and scale, noting that a rash may va	ry in colour on different skin tones			
	¥ Yes				
Provisional d	agnosis for Acute exacerbation	of Mild Plaque Psoriasis			

Exclusion from trialrefer to medical care Immediate ED or GP referral – no treatment Treat & Referral to GP - conservative treatment as required

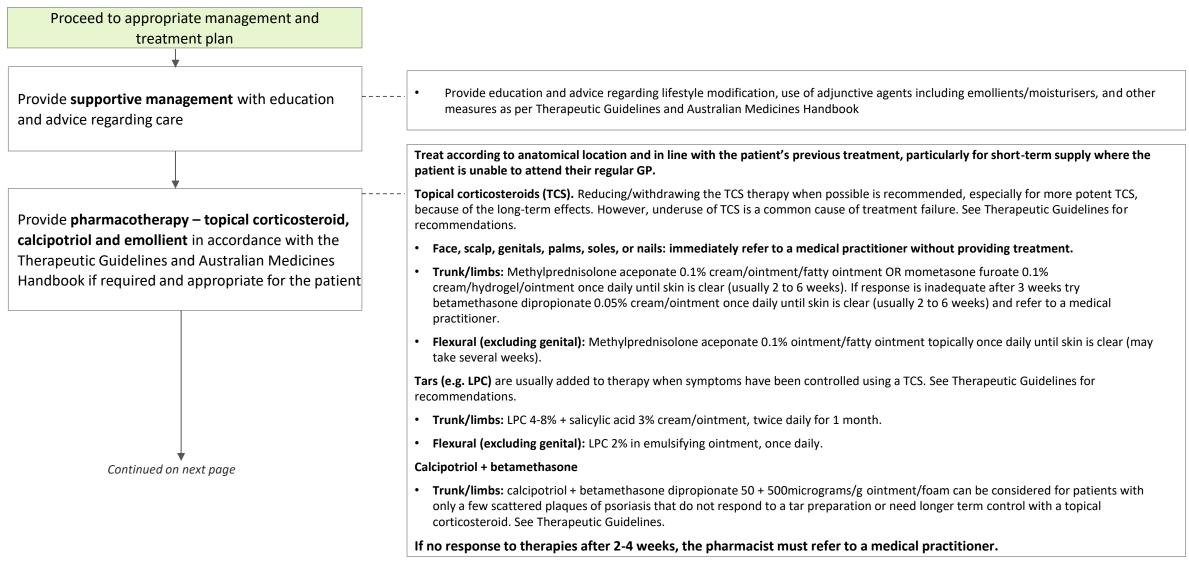


#### Acute exacerbation of Mild Plaque Psoriasis | Clinical practice guideline (2/4)

**Treatment Algorithm** 2. Identifying primers for differential diagnosis and referrals

Provisional diagnosis of exacerbations of mild plaque psoriasis	
<ul> <li>Complications of exacerbation of mild plaque psoriasis has been identified:         <ul> <li>Psoriatic lesions are infected.</li> </ul> </li> <li>Clinical symptoms warranting referral:             <ul> <li>The psoriasis affects the face, scalp, genitals, palms, soles, or nails. Pharmacists must not provide treatment and must always refer to a medical practitioner.</li> <li>The patient presents with a type of psoriasis other than mild plaque psoriasis or where there is a new diagnosis (including plaque psoriasis that is moderate or severe).</li> </ul> </li> <ul> <li>Other medical conditions and medications:             <ul> <li>Patient is immunocompromised due to underlying medical condition(s) and/or medications, including uncontrolled diabetes</li></ul></li></ul></ul>	Yes Refer ED/C
<ul> <li>Diagnosis is unclear.</li> <li>There is no response to optimal topical treatment (within 3 to 6 months), or the condition worsens or reoccurs.</li> <li>The patient has psoriatic comorbidities or risk factors that require management (e.g. arthritis).</li> <li>The patient has not seen a medical practitioner for review of their condition in the previous 12 months.</li> <li>*Note for pregnancy or planning a pregnancy: Use the lowest appropriate potency of topical corticosteroid for the shortest time necessary where moisturisers and other simple measures are inadequate. As safety data are lacking for mometasone (Australian category B3), use others in preference.</li> </ul>	<ul> <li>Immediate ED referral – treatment</li> <li>Immediate GP referral – treatment</li> <li>Treat &amp; referral to GP – conservative treatment required</li> </ul>
Proceed to appropriate treatment	Yes Treat
Exclusion from trial- refer to medical care Immediate ED or GP referral – no treatment - conservative treatment as required Immediate CD or GP	

### Acute exacerbation of mild plaque psoriasis | Clinical practice guideline (3/4)



### Acute exacerbation of mild plaque psoriasis | Clinical practice guideline 4/4)

