

The British Association of Dermatologists' guidelines for the management of contact dermatitis 2017

G A Johnston,
L Exton, MF Mohd Mustapa, J Slack, IM Coulson,
JSC English, J Bourke

Contact Dermatitis Guidelines Development Group

- To provide up-to-date, evidence-based recommendations for the management of contact dermatitis.
 - Appraisal of all relevant literature up to February 2016
 - Address important, practical clinical questions

The group included

- Dermatologists
 - Nurses
 - Patients
- Information scientists

Previous grading system

Level of evidence

Level of evidence	Type of evidence
1++	High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias
1+	Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1-	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias*
2++	High-quality systematic reviews of case-control or cohort studies High-quality case-control or cohort studies with a very low risk of confounding, bias or chance and a high probability that the relationship is causal
2+	Well-conducted case-control or cohort studies with a low risk of confounding, bias or chance and a moderate probability that the relationship is causal
2-	Case-control or cohort studies with a high risk of confounding, bias or chance and a significant risk that the relationship is not causal*
3	Non-analytical studies (for example, case reports, case series)
4	Expert opinion, formal consensus

*Studies with a level of evidence '1-' should not be used as a basis for making a recommendation.

Strength of recommendation

Class	Evidence
A	<ul style="list-style-type: none"> At least one meta-analysis, systematic review, or RCT rated as 1++, and directly applicable to the target population, or A systematic review of RCTs or a body of evidence consisting principally of studies rated as 1+, directly applicable to the target population and demonstrating overall consistency of results Evidence drawn from a NICE technology appraisal
B	<ul style="list-style-type: none"> A body of evidence including studies rated as 2++, directly applicable to the target population and demonstrating overall consistency of results, or Extrapolated evidence from studies rated as 1++ or 1+
C	<ul style="list-style-type: none"> A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results, or Extrapolated evidence from studies rated as 2++
D	<ul style="list-style-type: none"> Evidence level 3 or 4, or Extrapolated evidence from studies rated as 2+, or Formal consensus
D (GPP)	<ul style="list-style-type: none"> A good practice point (GPP) is a recommendation for best practice based on the experience of the guideline development group

RCT: randomised controlled trial; NICE: National Institute for Health and Care Excellence.



Grading of Recommendations,
Assessment, Development and
Evaluation

British Association of Dermatologists
April 2014

GRADE has been adopted by the WHO, Cochrane
Collaboration, NICE, SIGN and 70+ international
organisations

PICO method

a technique used in evidence-based practice to frame and answer a clinical question

- **P** population/patient
- **I** intervention
- **C** comparator/control (if applicable)
- **O** outcome

“In a patient with severe chronic hand eczema would treatment with alitretinoin lead to an improvement in clinical signs?”

Clinical questions

In patients with contact dermatitis:

Diagnosis

Which and how many allergens should be used in tests?

When should tests be carried out?

Does increasing the number of allergens tested improve diagnosis?

Prevention

Does education improve or prevent hand dermatitis?

Do barrier creams improve hand dermatitis?

Treatment

Does topical treatment work?

Does systemic treatment work?

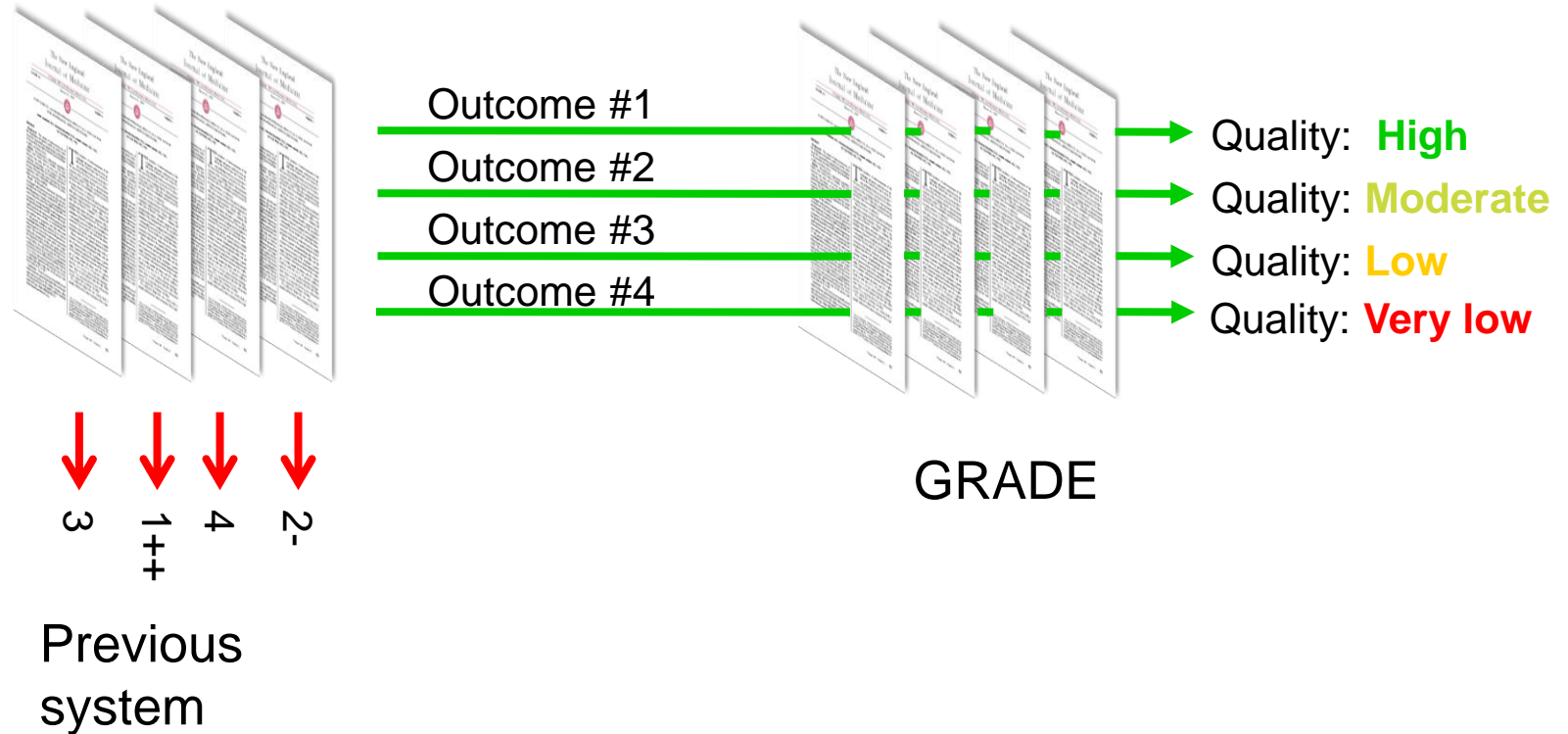
Do soap substitutes improve contact dermatitis?

Does education as a treatment work?

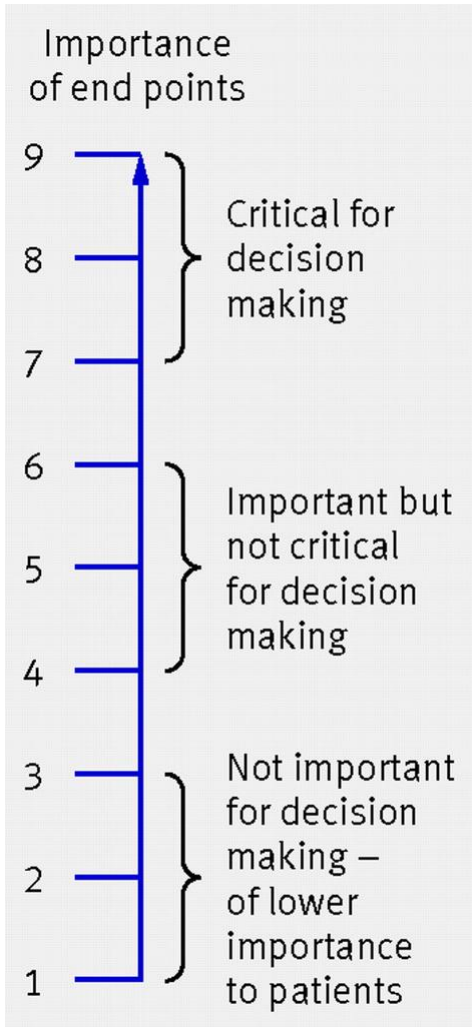
Does phototherapy work?

Defining outcomes

GRADE is outcome-centric



Defining outcomes



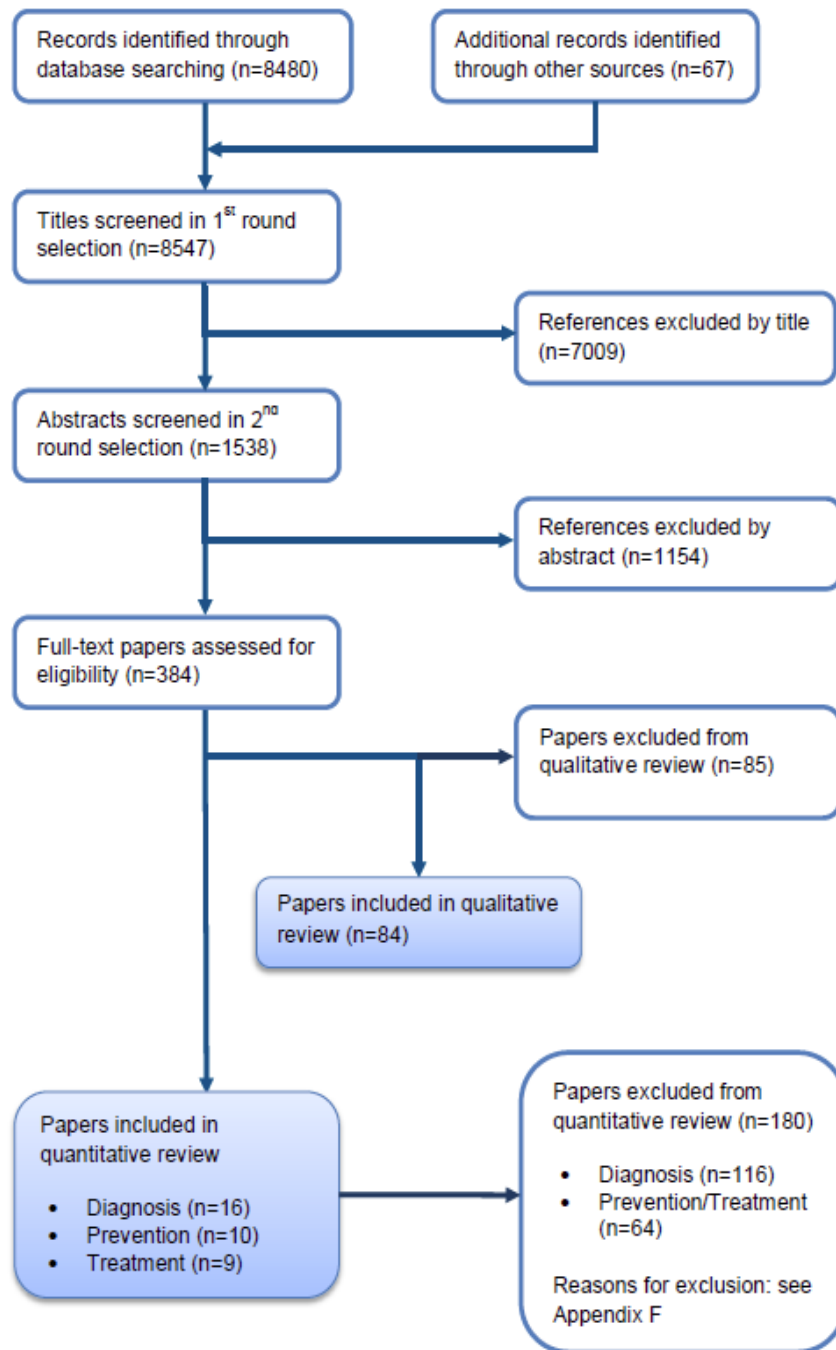
GRADE challenged the GDG to:

- specify all outcomes of importance to patients
- differentiate outcomes that are critical for decision-making from those that are important but not critical, and those that are not important

Outcome measures

- Return to / remain in work (9)
- Improvement in Quality of Life (8)
- Improved or clearance of dermatitis (8)
- Treatment tolerability (5)
- Prevention of dermatitis (5)
- Side effects of interventions (4)

Appendix A: PRISMA diagram – study selection



Formulate question

Select outcomes

Rate importance

Outcomes across studies

Create evidence profile with GRADEpro

Rate quality of evidence for each outcome

RCT start high, observational data start low

Risk of bias
Inconsistency
Indirectness
Imprecision
Publication bias

Large effect
Dose response
Confounders

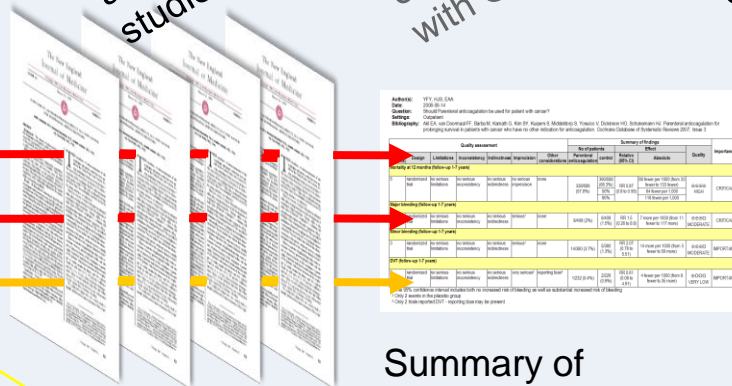
P
I
C
O

Outcome Critical

Outcome Critical

Outcome Important

Outcome Less important



Summary of findings & estimate of effect for each outcome

High
Moderate
Low
Very low

Grade down

Grade up

Systematic review

Guideline development



Present evidence profile to GDG for rating the overall quality of evidence

Formulate recommendations:

- For or against (direction)
- Strong or weak (strength)

By considering:

- Quality of evidence
- Balance benefits/harms
- Values and preferences
- Resource use (cost)



NICE recommendations:

- "Should offer..."
- "Consider offering..."
- "Consider not offering..."
- "Should not offer..."

Summary of recommendations

Strength

Diagnosis

Offer patients with suspected contact dermatitis a patch test with a baseline series of allergens

↑↑

In identifying allergens in patients with contact dermatitis, consider testing for additional series dependent on allergen exposure

↑

Consider additional readings at day 6 or 7 if the results are unexpectedly negative at day 4

↑

Summary of recommendations	Strength
----------------------------	----------

Prevention

Consider skin care and skin protection creams in preventing occupational dermatitis	↑
---	---

Treatment

Offer alitretinoin to patients with severe chronic hand eczema	↑↑
Consider topical tacrolimus to patients with contact dermatitis where topical steroids are unsuitable or ineffective	↑
Consider PUVA therapy for treating patients with chronic hand eczema	↑
Consider patient education in occupational contact dermatitis	↑

Summary of good-practice recommendations (informal consensus)

Use **clinical assessment tools** such as the Dermatology Life Quality Index (DLQI) and the Hand Eczema Severity Index (HECSI) for both the initial assessment and the response to treatment of patients with contact dermatitis

Take a **detailed history**, including symptoms and if they were related to application or use of any particular product, a specific activity or occupation

If related to the workplace **investigate the work practice** and products handled at work, supplemented by examination of health and safety data sheets

Provide a PIL on patch testing as part of the counselling process, which includes information on potential side effects. Informed patient consent should be obtained

Offer patch testing for patients with **chronic or persistent dermatitis** as clinical features alone are unreliable in distinguishing allergic contact from irritant and endogenous dermatitis, particularly with hand and facial dermatitis

Summary of research recommendations

The methodology and reporting of results of future patch test studies should be standardized

High-quality studies are needed to address the efficacy of interventions for contact dermatitis, including:

- **topical tacrolimus versus topical corticosteroids**
- **combination of tacrolimus and topical corticosteroids**
- **alitretinoin versus PUVA for hand dermatitis**
- **development and evaluation of skin barrier repair products**
- **development of new wash products that do not damage the skin barrier**

Efficacy of systemic therapies – ciclosporin, azathioprine, methotrexate – needs to be determined

Recommended audit points

1. A PIL which includes information on potential side effects.
2. Informed consent.
3. Application of the appropriate national or international baseline series.
4. Application of all allergens at the correct concentration and correct vehicle.
5. Prescription of further allergens during the tests to clarify doubtful reactions
6. Accurate interpretation of reactions as either allergic or irritant and relevance.
7. Recording of any adverse outcomes of patch testing and actions taken.
8. A discharge letter with a clinical diagnosis and allergen-specific information
9. Collation of local patch test results into a database.
10. Benchmarking of local patch test results against national collated figures.

Thankyou



Advantages of GRADE over other systems



- Produced by international guideline developers
- Clear separation between quality of evidence and strength of recommendations
- Explicit evaluation of the importance of outcomes of alternative management strategies
- Explicit criteria for downgrading and upgrading quality of evidence ratings
- Transparent process of Linking Evidence To Recommendations
- Clear, pragmatic interpretation of strong versus weak recommendations for clinicians, patients and policy makers