IFD RDH: Medical
Crusted (Norwegian) Scabies Grading Scale and Treatment Plan
Royal Darwin Hospital Infectious Diseases Department Protocol

Target Audience
Areas applicable: Physicians and Medical Staff in all Top End Hospitals

(A) Distribution and extent of crusting
1. Wrists, web spaces, feet only (<10% Total Body Surface Area)
2. Above plus forearms, lower legs, buttocks, trunk or 10-30% TBSA
3. Above plus scalp OR >30% TBSA

(B) Crusting / Shedding
1. Mild crusting (<5mm depth of crust), minimal skin shedding
2. Moderate (5-10mm) crusting, moderate skin shedding
3. Severe (>10mm), profuse skin shedding

(C) Past Episodes
1. Never had it before
2. 1-3 prior hospitalizations for crusted scabies OR depigmentation of elbows, knees
3. >=4 prior hospitalizations for crusted scabies OR depigmentation as above PLUS legs/back or residual skin thickening / ichthyosis

(D) Skin Condition
1. No cracking or pyoderma
2. Multiple pustules and/or weeping sore and/or superficial skin cracking
3. Deep skin cracking with bleeding, widespread purulent exudates

SCORE FOR GRADING: 4-6 = Grade 1 7-9 = Grade 2 10-12 = Grade 3

Ivermectin dosing: 200mcg/kg rounded up to nearest 3mg, taken with food for better bioavailability
Grade 1: 3 doses: Days 0,1, 7
Grade 2: 5 doses: Days 0,1, 7,8, 14
Grade 3: 7 doses: Days 0,1, 7,8, 14, 21, 28

Topical agents: all grades:
1. Benzyl benzoate with added tea tree oil at 5% concentration (made in pharmacy) 2nd daily for first week, twice weekly thereafter till discharge/cured – or use 5% permethrin, same dosing schedule. Apply after bath or shower with soaking then scrubbing skin
2. Keratolytic cream e.g. Calmurid® (urea 10%, lactic acid 5%) second daily alternating with scabicideal agent, until hyperkeratosis has resolved

Investigations: For each admission; skin scrapings, FBC, CRP, LFTs, U+E, blood cultures, pregnancy test for females prior to ivermectin.
If no obvious pre-disposing immunocompromising factor and if not already done on an earlier admission; HIV, HTLV-I, ANA, C3, C4, immunoglobulins/IgE, T cell subsets.
Antibiotics: Are often necessary for secondary bacterial sepsis, which may not be clinically evident and may involve multiple organisms, including Gram-negatives in addition to *S. aureus* and *S. pyogenes*.

Environmental measures:
1. Treat all household members with topical therapy
2. Wash bed linen and clothes
3. Bomb each room of house with insecticide (e.g. *Raid “Exterminator”*, *Pea Beau “Control”*) or arrange for fumigation by EHO
4. For patient – hospitalization preferable, with single room isolation and contact precautions whilst caring for patient (long-sleeved gown, gloves, shoes and hair cover).

Alternative Search Words: Norwegian scabies,

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