SCABIES PROTOCOL

1. Cause/Epidemiology

Scabies is an infestation of the skin by the human itch mite *Sarcoptes scabiei.* The adult female scabies mites burrow into the upper layer of the skin (epidermis) where they live and deposit their eggs[7.3]. Scabies occurs worldwide in all socio-economic conditions, but are common in crowded situations, without regard to age or sex. It can spread easily where close body and skin contact occurs.

2. Clinical Presentation

Scabies presents as a pimple-like (papular) itchy rash affecting much of the body or is limited to common sites such as the flexor surfaces of the wrists, finger webs, sides of digits, elbows, axillae, male genitalia, nipple areola, and periumbicular area. The rash may also be on the head, neck, palms, and soles in infants. Sensitization to the proteins and feces of the mite causes the itchy rash. Characteristically, the burrows appear as tiny and crooked grayish-white or skin-colored lines on the skin surface. The itching is often worse at night or after bathing. The intense itching of scabies leads to scratching that can cause skin sores. These sores can become infected with bacteria on the skin. These skin infections can lead to an inflammation of the kidneys called post-streptococcal glomerulonephritis.

Crusted/Norwegian Scabies
Some immunocompromised, elderly, disabled or debilitated persons are at risk for a severe form of scabies called crusted or Norwegian scabies. This type of scabies is characterized by vesicles and thick crusts over the skin, which contains large numbers of scabies mites and eggs. Persons with crusted/Norwegian scabies may not demonstrate the usual signs and symptoms of scabies such as the characteristic rash or itching. This can be due to the person's altered immune status or neurological condition. The rash in these cases may resemble psoriasis or eczema.

3. Transmission

Transmission of the mite is by direct skin-to-skin contact. An infested person can spread scabies even if they have no symptoms. Indirect contact can occur from undergarments, or bedclothes contaminated by a person with untreated scabies to an uninfected person. Scabies can be easily passed by an infected person to their household members and sexual partners. Transmission can occur as long as the infested person remains untreated and until 24 hours after treatment. The mites do not live for more than 3 to 4 days without contact with skin.

Crusted/Norwegian scabies is highly infectious because of the large number of mites in the exfoliating skin scales. Minimal, unprotected contact is all that is required for transmission. Persons with crusted/Norwegian scabies should receive prompt and aggressive medical treatment for their infestation to prevent outbreaks of scabies[7.3].

Reservoir: Humans are the only reservoir.

4. Incubation Period

Incubation period is 2-6 weeks. Reinfestation provokes symptoms within1-4 days [7.4].

5. Infection Prevention and Control Practices

Implement Contact Precautions immediately for a patient with Scabies. Maintain Contact Precautions until 24 hours after initiation of appropriate therapy. Refer to Contact Precautions in the Additional Precautions section. The duration of Contact Precautions is different for Scabies versus Norwegian scabies. Following treatment of uncomplicated scabies, pruritus may persist for several weeks even though the mites are dead. This does not typically require that the patient be managed on contact precautions beyond what is recommended in the clinical presentation/infectious disease table. This is not an indication of treatment failure, but rather a reaction to the dead mites. It is not an indication to retreat unless new burrows are identified. Clothing, linen and towels used 4 days prior to treatment should be washed using hot water and dried using the hot dryer cycle. Items that cannot be washed should be stored in a closed plastic bag for 1 week[7.4]. Clean and disinfect multiple use equipment (i.e.: blood pressure cuffs), with facility approved disinfectant[7.4]. Close contacts should consider seeking assessment for Scabies by their healthcare provider. Crusted/Norwegian scabies are sensitive to the same treatment as typical scabies; however, the large number of mites and the unusual accompanying rash make repeat treatment mandatory. A diagnosis of Norwegian scabies typically requires contact precautions be maintained until lesions have resolved. However, these cases are best managed on a case by case basis.

Pediatric Considerations

Family members rooming in with pediatric patients should receive treatment. The index case should also receive treatment. Parents with scabies visiting in the NICU should use Contact Precautions until 24 hours after treatment. Mothers with scabies delivering healthy infants should be treated; the infant can room with the mother. Other family members should also be treated. Avoid skin to skin mother/infant contact with affected areas until after the mother had completed and washed off the treatment. [7.2]

6. Occupational Health

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and/or concerns.

7. References

7.1. Canadian Guidelines on Sexually Transmitted Infections: Section 5 - Management and Treatment of Specific Infections: Ectoparasitic Infestations (Scabies). (2013, February). Public Health Agency of Canada (PHAC). Available at: http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-5-3-eng.php.

7.2. Expert opinion. Scabies: pediatric considerations email. (2016, October 6). Dr. J Embree.

7.3. Parasites – Scabies: Epidemiology & Risk Factors. (2010, November). Centers for Disease Control and Prevention (CDC). Available at: http://www.cdc.gov/parasites/scabies/epi.html.

7.4. Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (2012, April). Manitoba Health. Available at: http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf.

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