



Cercarial Dermatitis in Hall County: A Case Report

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Background Information

Cercarial Dermatitis (Swimmer's Itch):

- Maculopapular rash caused by an allergic reaction to certain microscopic parasites that preferentially infects some birds and mammals but can burrow itself into the skin of a swimmer.
- The parasites are released from infected snails into fresh and salt water. This occurs throughout the world, but is more frequent in summer months
- Distribution of rash is limited to the area of the body that immersed in water
- Swimmer's itch is not contagious and cannot be spread from person to person

Symptoms:

- Small reddish pimples or blisters, tingling, burning or itching of skin
- Onset of symptoms within minutes to days after exposure to contaminated water
- Itching can last up to 1 week or more but gradually resolves
- The greater number of exposures the more intense and immediate symptoms may be

Differential Diagnosis:

- Sea bather's eruption
 - Occurs after saltwater exposure and tends to affect areas of skin covered by clothing or hair. This is opposite of cercarial dermatitis
- Hot tub folliculitis
 - Occurs following recent exposure to hot tub, whirlpool, swimming pool or water slide. Present as diffusely distributed follicular lesions

Treatment:

- Supportive care including corticosteroid cream, cool compresses, Epsom salt or oatmeal baths, anti-itch lotion.
- TRY NOT TO SCRATCH!

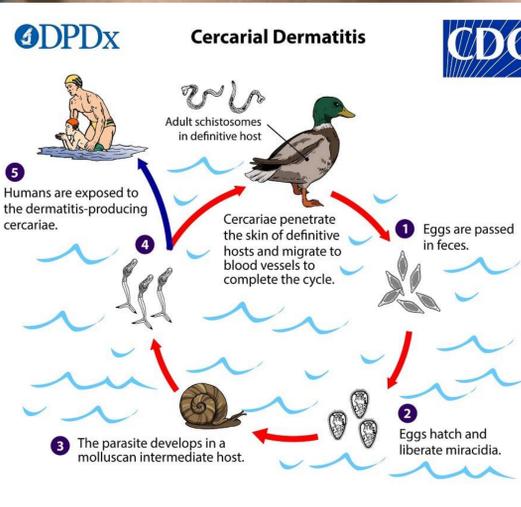
Case Report

A 30-year-old Caucasian female presents to our family medicine continuity clinic following the developing of a diffuse rash all over her body. This rash has since resolved but she provided images as seen below. She describes the rash as itchy, bumpy and feels like her skin is on fire. Rash takes about 2-3 days to resolve with the use of Benadryl for relief of itch. This has occurred about four times in the last year.

- Patient noticed this occurs whenever she has gone swimming in a lake specifically, Lake Hartwell and Lake Lanier.
- No occurrences outside of swimming in the lake
- She notes her friends or family do not develop a similar rash and rash is develops on areas not exposed to a bathing suit.
- She has tried changing sunscreens with no benefit
- Patient has a history of allergy testing and has only tested positive to allergy of dust mites.

Due to the rash resolving by the time of presentation we were unable to do a skin scrape or biopsy of rash.

Images



Conclusion

Diagnosis of Cercarial Dermatitis is based on clinical suspicion.

Serologic tests are not commonly done, but the leukocyte differential may show peripheral eosinophilia.

Histopathology may show spongiosis, dermal edema, and mixed inflammatory infiltrate. Rarely, cercariae can be observed.



Fig. 2 a Cercaria of *Trichobilharzia* sp.—larval stage of a bird schistosome; b *Trichobilharzia* sp. schistosomula (arrows) in the mouse skin during initial infection (4 h p.i.); c cercarial dermatitis caused by *Trichobilharzia* sp. on day 2 p.i. (photo by L. Mikeš); d *T. regenti* schistosomula in the mouse spinal cord on day 3 p.i.

Discussion

Prevention of swimmer's itch includes

1. Carefully choosing your swimming spots. Check to see if warning signs have been posted and avoid marshy areas where snails are commonly found
2. Avoid the shoreline if possible
3. Rinse after swimming and vigorously dry your skin with a towel
4. Avoid feeding the birds! Especially those on docks or near swimming areas
5. Apply waterproof sunscreen as this may protect the skin from the parasite that causes swimmer's itch.

References

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- 2) Parasites-Cercarial Dermatitis (also known as Swimmer's Itch) Last reviewed 22 October 2018. www.cdc.gov
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