Overdiagnosis and consequent mismanagement of head louse infestations in North America.

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Abstract

BACKGROUND:

Lay personnel and many health care workers in the United States believe that head louse infestations caused by Pediculus capitis are exceedingly transmissible and that infested children readily infest others. Schoolchildren therefore frequently become ostracized and remain so until no signs of their presumed infestations are evident. Repeated applications of pediculicidal product and chronic school absenteeism frequently result.

METHODS:

To determine how frequently louse-related exclusions from schools and applications of pediculicidal therapeutic regimens might be inappropriate, we invited health care providers as well as nonspecialized personnel to submit specimens to us that were associated with a diagnosis of pediculiasis. Each submission was then characterized microscopically.

RESULTS:

Health care professionals as well as nonspecialists frequently overdiagnose pediculiasis capitis and generally fail to distinguish active from extinct infestations. Noninfested children thereby become quarantined at least as often as infested children. Traditional anti-louse formulations are overapplied as frequently as are "alternative" formulations. Pediculicidal treatments are more frequently applied to non-infested children than to children who bear active infestations.

CONCLUSIONS:

Pediculicidal treatments should be applied solely after living nymphal or adult lice or apparently viable eggs have been observed. Because health care providers as well as lay personnel generally misdiagnose pediculiasis, and because few symptoms and no direct infectious processes are known
to result, we suggest that the practice of excluding presumably infested children from school may be more burdensome than the infestations themselves.

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