

Otitis externa from *Pseudomonas aeruginosa* in swimming pools

Sir,

Outbreaks of otitis externa due to *Pseudomonas aeruginosa* acquired from swimming pools are well recognized.¹ A high bather load, inadequate chlorination and raised temperature all encourage the growth of the organism.¹ Although some outbreaks have arisen from newly opened pools,^{2,3} continued vigilance is necessary as the following report indicates.

My training practice was responsible for the boarders at a local preparatory school. Ten boys, aged eight to thirteen years, presented on the same day with otitis externa. All had one or more of the following signs: oedema, erythema or scaling of the external canal. There was no exudate. The duration of symptoms varied from one to seven days. All 10 had used the school pool most weekdays for the previous term; none had used any other pool in the previous fortnight. *P. aeruginosa* was cultured from seven ear swabs out of 10.

Tests instigated by the community physician showed that chlorine levels were satisfactory and the water free of organisms. However, the tests were performed one week after the boys were first seen and at a time that an inspection was expected. Closer questioning of the headmaster revealed that chlorination of the pool was haphazard. Hypochlorite was added erratically, measurements made only occasionally on a meter that had not been calibrated since its purchase in the distant past. Although for research purposes, serotyping of the cultured *Pseudomonas* would be required to prove the epidemic had a common source, the circumstantial evidence was so strong and in keeping with known facts¹ that for practical purposes the swimming pool was incriminated.

With the increasing popularity of swimming, general practitioners should be alert to the possibility of pools as a source of infection in epidemics of otitis externa, particularly in closed communities.

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References

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Ultrasound therapy for herpes zoster pain

Ultrasound therapy for the pain of acute herpes zoster has been used with encouraging results.^{1,2} Although the pain of shingles can be severe, it must be remembered that pain disappearing spontaneously early in the illness is often witnessed and there appears to be an urgent need for controlled trials before ultrasound therapy becomes a standard part of management.

A recent case suggests that caution may be necessary before using ultrasound in early disease. A 60-year-old man in generally good health developed right-sided abdominal shingles and on the third day was given ultrasound treatment following which on the fourth day the rash was disseminated (Figure 1). There was no clinical or haematological evidence to suggest immunosuppression which is usually present when there is extensive dissemination, in contrast to the occasional vesicle on other parts of the body which is often found especially in the elderly. It may be that the dissemination had nothing to do with the ultrasound therapy but ultrasound causes vasodilatation and increased cell permeability³ which would seem to be an ideal way of releasing virus from infected cells. If sufficient virus were released to overwhelm the immunological response established following

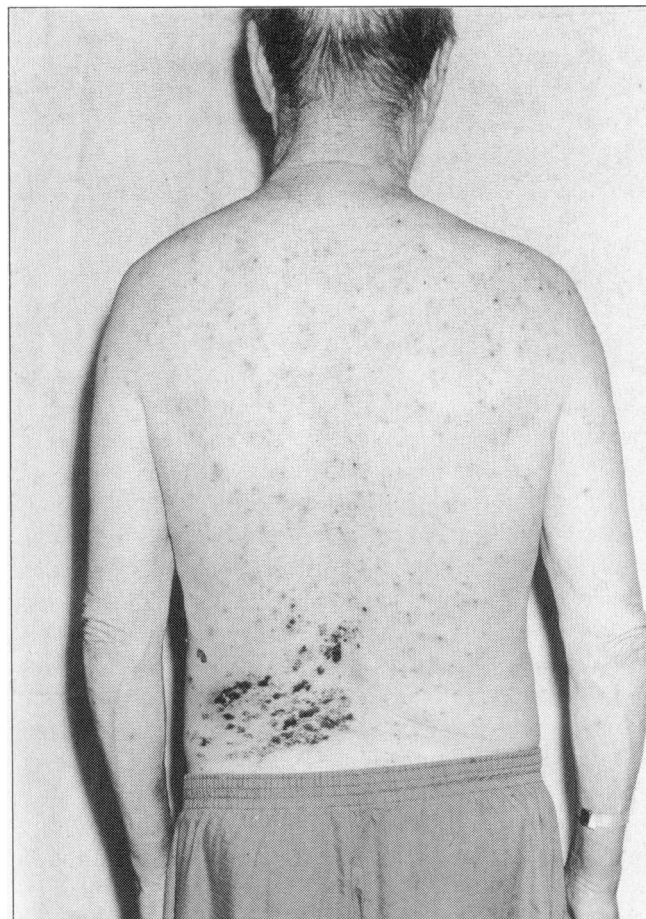


Figure 1. Disseminated herpes zoster after ultrasound therapy.