
Peer Commentary on "Child-Proofing of Hearing Aids to Prevent Hazards Posed by Battery Swallowing" by Denis Roy

Commentaires des pairs sujet de "Mesures pour éviter que les enfants n'avalent des piles de prothèses auditives" par Denis Roy

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Hearing Aid Battery Ingestion: The Wrong Solution

Denis Roy's article on the "Child-Proofing of Hearing Aids to Prevent Hazards Posed by Battery Swallowing" (*JSLPA*, 16, 243-246) reminds clinicians again of the need to treat hearing aid button batteries as the toxic products they are. Although there may be some benefit to modifying hearing aids so that the batteries cannot easily be removed by children, that would seem to be a misplaced focus of effort. In 1984 I argued that the focus ought to be on making the batteries themselves taste aversive (Rudmin, 1984a, b, c). I would like to make that argument again here.

Roy (1992) cites evidence that there are almost 300 cases of button battery ingestion per year. But these are only reported cases, and only in North America. The full incidence rate must be far higher. But of all cases, how many involve hearing impaired children opening their own hearing aids and removing the batteries to swallow them? I have no statistic on this, but it must be a very small proportion of the total cases. From my former clinical experience with hearing impaired children, I believe most come surprisingly fast to an acceptance of their hearing aids as an instrumental part of their person. The vast majority of button battery ingestion cases must involve normally hearing children getting their hands on stray batteries. And it must be noted that hearing aid batteries comprise a small minority of button batteries available in the market and distributed across our homes. Watches, calculators, toys, even greeting cards have button batteries in them.

Thus it would seem that a solution to the problem of button battery ingestion should not focus on hearing aids, nor even exclusively on hearing aid batteries. The simplest solution would be for government to require all battery manufacturers to coat part of the surface of all button batteries with a non-toxic but awful tasting substance that would cause an ingested battery to be immediately spat out. In concert with

this there should be a more general consumer awareness campaign on the fact that all batteries contain dangerous substances that require care and special disposal.

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References

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- Rudmin, F. (1984b). (on hearing aid battery ingestion). *Human Communications Canada*, 8, 397.
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Reply to Commentary

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Mr. Floyd Rudmin makes a case for focusing on the hazard posed by all types of small button batteries. His solution for coating part of the surface of button batteries with a non-toxic but awful tasting substance is worth considering. Clinicians and consumer groups should lobby button battery manufacturers to research its feasibility. What would happen to the coating after a lengthy period of time? Would it flake off or lose its taste? Would the substance interfere with good electrical contact? Would it foul the battery contacts of the device? As Mr. Rudmin points out, greater consumer awareness on the dangers posed by these batteries is required.