



the Australian & New Zealand Society of Paediatric Otorhinolaryngology

<http://www.anzspo.org>

BUTTON BATTERIES IN CHILDREN

The Australian and New Zealand Society of Paediatric Otorhinolaryngology (ANZSPO) promotes and encourages excellence in the care of infants, children, and adolescents as it relates to diseases of the ear, nose, and throat. The Society promotes clinical information sharing and research in Paediatric Otorhinolaryngology and has an annual forum to discuss this. Membership is for Ear, Nose, and Throat - Head & Neck surgical specialists who devote a substantial portion of their clinical work to Paediatric care.

Dr Hannah Burns, a member from Brisbane, on behalf of ANZSPO, has contributed to the recent ACCC position paper on button batteries and would like to increase awareness of the dangers of button batteries in children.

Button batteries power a range of devices, from small appliances, toys, and novelty items, to medical equipment and devices such as hearing aids. These small batteries are potentially lethal if swallowed and can cause permanent damage if inserted into any body orifice. Once in contact with a moist body cavity, button batteries react with tissues to release an electrical current which potentially causes a significant burn.

If swallowed, the burn from a button battery can cause a hole in the oesophagus (the swallowing tube) within 4 hours. Two children in Australia have died due to erosion into the aorta (a large blood vessel in the chest), causing significant bleeding. Even after removal of the button battery, scarring can cause long term swallow difficulties, sometimes requiring feeding via a tube. Proximity to the airway can result in breathing difficulties and the need for tracheostomy. A child in Queensland has long term spinal injury due to a battery damaging his spinal cord. In the ear they can cause hearing loss and nerve damage. In the nose, septal perforation can result in loss of nasal support with nasal collapse.

Even “flat” (discharged) batteries carry enough charge to cause serious injury. Every week five children present to emergency departments in Australia having swallowed a button battery.

Currently no legislation exists to ensure these batteries are packaged or sold in a child safe manner.

ANZSPO members remind parents and older family members that button batteries should be stored out of reach of children, used batteries should be returned to a battery recycling program (eg via Battery World); and if this is not possible, the button battery should be wrapped in strong tape and disposed

of into a secure waste bin. For your child's protection, when purchasing products containing button batteries, check that the battery compartment is secure and requires a device (like a screwdriver) to open it. Products that do not meet this requirement should be reported to the ACCC (<https://www.productsafety.gov.au/contact-us/for-consumers/report-an-unsafe-product>) or via the Office of Fair Trading in your State.

If a battery is swallowed, call Australian Poisons hotline (ph 131126) immediately. They will direct you to your closest hospital for an XRay and assist with urgent removal. If a battery is inserted into an ear, nose or other orifice immediately seek medical advice to ensure timely removal. Do not attempt to flush it out since it may be displaced further into the ear or nose.

If you live in a rural region without surgical assistance close-by, then recent evidence supports feeding your child honey (2 teaspoons every 10 min). This may reduce the severity of the injury by coating the battery with honey and so and neutralising the chemical reaction. There is a small but recognised risk of botulism from honey in children under 12 months of age. This risk should be balanced against potential risk of a severe injury from ingestion of a button battery.

Community education regarding the dangers of button batteries is vital to raise awareness and prevent life threatening injuries. ANZSPO supports the ACCC's position paper asking for legislative changes to protect Australian children from this preventable injury,