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Abstract Title: The Unsafe Option for Hair Lice Treatment in Children

Lindane, also known as 1% gamma benzene hexachloride, is an organochlorine insecticide that has been in use for over 90 years. It is a potent pesticide and has been effective in controlling scabies and pediculosis. Despite its effectiveness, lindane has been linked to several adverse side effects. It is particularly toxic to humans, and instances of poisoning have been reported following ingestion of, or exposure to, lindane.

This case involves a 9-year-old boy and sibling who reportedly ingested a spoonful of Scaboma solution (hair lice medication). He experienced abnormal movements and vomiting but was alert and stable upon examination. He showed signs of metabolic and lactic acidosis, which improved with intravenous saline treatment. The patient's elder brother, who also allegedly ingested some of the solution, vomited but exhibited no other symptoms. His physical examination and blood tests were normal. Both siblings were admitted to the paediatric ward for observation.

The toxicity of Lindane is especially hazardous for specific demographics such as the elderly, young children, and people weighing less than 50 kg. These groups are at a higher risk, possibly due to increased systemic absorption, and neurologic susceptibilities such as a more permeable blood brain barrier in the extremes of ages.

One of the most concerning aspects of Lindane's toxicity is its ability to store in body fat and infiltrate the lipid-rich white matter of the brain, leading to neurotoxicity. This toxicity is prevalent and is responsible for most reported adverse effects. Symptoms can include ataxia, disorientation, tremors, seizures, and even death.

Moreover, chronic exposure to lindane has led to other serious systemic effects, such as depressed liver function, cardiac arrhythmias, and altered menstruation. Several cases of aplastic anemia have also been reported with lindane usage. As a result, Lindane is no longer recommended for use in children younger than 10, individuals weighing less than 50 kg, breastfeeding women, older adults, or people with a compromised dermal barrier.

Given the significant morbidity and mortality associated with the use of lindane and the existence of other safer alternatives, there have been calls to remove lindane from the pharmaceutical market for hair lice control.