

## An Unusual Case of Kerosene Oil Poisoning

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Accidental kerosene oil poisoning continues to remain a serious pediatric problem in India and other developing countries(1,2). Poisoning from this hydrocarbon results mainly from ingestion because of its low surface tension and thus can easily be aspirated within the respiratory tract by vomiting or eructation(3,4). Kerosene oil poisoning can also occur as a result of inhalation of the vapors(3,4) and its absorption through dermal routes may produce many kinds of systemic toxicity(5). We report here a case of kerosene oil poisoning in a 1 1/6-month-old child when applied over the skin and to the best of our knowledge is the youngest patient ever reported.

### Case Report

A 1<sup>1/2</sup>-month-old male baby was brought with intense respiratory distress and in an unconscious state. The infant was suffering from mild fever, cough and cold for the last few days and was being treated outside. On that day the mother had massaged kerosene

oil over the chest and back of the child to alleviate his ailment. Three to four hours after rubbing of kerosene oil, the child developed breathing difficulty and became drowsy.

On examination, smell of kerosene oil was detected. The infant was in deep coma, gasping with cold and clammy extremities. Pupils were widely dilated and sluggishly reacting to light. Pulmonary findings included diminished breath sounds and crepitations on both sides.

No investigation such as X-ray chest and ECG could be done at this stage. He was treated promptly with oxygen, steroids, fluids, aminophylline, dopamine and antibiotics but died soon after admission. Gastric aspirate collected immediately after death did not show presence of kerosene oil. Unfortunately post-mortem confirmation of the clinical findings could not be ascertained in this case.

### Discussion

It is evident from history and clinical findings that this infant has died of kerosene oil poisoning. Most probably poisoning has occurred as a result of inhalation of kerosene vapors(3,4). Moreover, kerosene oil can get absorbed from the thin skin of the baby as a result of rubbing a widespread area of the body with this agent. Accidental ingestion of kerosene oil is one of the most common poisonings in this sub-continent, particularly among the toddlers who become an easy victim due to their natural curiosity and its easy accessibility in most home surroundings. Surprisingly, in the present case, the child was only 1 1/6-month-old and kerosene oil poisoning in such a young infant was unique as regards to age and mode of poisoning. However, incidents of kerosene oil poisoning in a 3-month-old boy inducted by his overenthusiastic 3-year-old sister(1)

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and in an under 6-month-old child administered by mother who mistook it for cough mixture, have been reported(2). In a series of 200 cases Baldachin and Melmed(6) mentioned cases of kerosene oil poisoning in children as low as 5-months of age.

This peculiar mode of kerosene oil poisoning as depicted in the present case reminds us how ignorance and prejudice regarding indigenous medication still prevalent amongst a sizable section of our population may at times cause irreparable damage or even death of those who require utmost care and protection.

#### REFERENCES

1. Gupta P, Singh RP, Murali MV, Bhargava SK, Sharma P. Kerosene oil poisoning A childhood menace. *Indian Pediatr* 1992, 29: 979-984.
2. Reddi YR, Rajeshwaramma V. Accidental kerosene oil poisoning in infants and children. *Indian Pediatr* 1967, 4: 141-144.
3. Klaaseen CD. Non-metallic environmental toxicants, air pollutants, solvents and vapors and pesticides. *In: The Pharmacological Basis of Therapeutics*, 8th edn, Vol II. Eds Gilman AG, Rail TW, Nies AS, Taylor P. New York, Pergamon Press, 1990, pp 1615-1639.
4. Friedman PA. Poisoning and its management. *In: Harrison's Principles of Internal Medicine*, 10th edn, Eds. Petersdorf RG, Adams RD, Braunwald, E, *et al.* New York, McGraw-Hill Book Co, 1983, pp 1259-1274.
5. Rumack BH. Chemical and Drug Poisoning. *In: Nelson Text Book of Pediatrics*, 13th Edn. Eds Behrman RE, Vaughan VC, Nelson WE. Philadelphia, WB Saunders Company, 1987, pp 1495-1505.
6. Baldachin BJ, Melmed RN. Clinical and therapeutic aspects of Kerosene poisoning - A series of 200 cases. *Br Med J* 1964, 2: 28-30.