

## **Hydrocarbon Poisoning in Children in Tehran: A 5-Year Retrospective Study**

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**Introduction :** Poisoning with petroleum Distillates was one of the most common poisonings, especially, among children in Iran. In recent years, the source of heating at homes change to gas and therefore the poison due to petroleum Distillates has reduced. To investigate the demographics, incidence, clinical manifestation, Lab& radiological finding of hydrocarbon poisoning in children, the recent research carried out on children hospitalized at the training center of loghman hospital that is the only center for poisoning victims in Tehran and district. **Methods :** The medical records of all children admitted for hydrocarbon poisoning from 1996- 2001 were reviewed retrospectively.

**Results :** Of the 232 admitted children(1996- 2001) in comparison with(3462 case1991-1995), 67% were boys and 33% were girls, with ages ranging from 6 months to 13 years (the most common was 2-3years).. The most patient was admitted during the summer (41.8%) & the least in winter (12.6%). The most common clinical manifestation was respiratory manifestations and then G.I manifestation, fever, and CNS manifestation. Among pulmonary, 75% cases had abnormal CXR. Chemical pneumonia was the most common symptom and after that, bacterial pneumonia, pleurisies, pneumothorax, pulmonary edema, pneumatocele, pneumomediastinum were seen. The Lab results were 70% ↑BUN, 30% ↑Cr. The most common finding in ABG was metabolic acidosis & respiratory alkalosis. 3.44 %( 8 cases) mortality reported due to pulmonary edema (3cases) and pneumothorax (4 cases) and pneumomediastinum (1 case). **Conclusions :** 1) Incidence of hydrocarbon poisoning was reduced in comparison with 5years ago. 2) There is a higher risk of hydrocarbon poisoning during the hot months of the year; 3) the majority of victims were dehydrated. 2) The respiratory system is the main target organ affected; 4) the most common CXR finding is interstitial pneumonitis. Hydrocarbon poisoning was a common Medical emergency with considerable morbidity and mortality. Parents should be educated to keep the kerosene out of reach of the children. So, that mortality and morbidity can be reduced to a great extent.