A case of Death from chlorfenapyr skin exposure and inhalation

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Introduction
Chlorfenapyr[IUPAC : 4-Bromo-2-(4-chlorophenyl)-1-ethoxymethyl-5-trifluoromethyl-1H-pyrrole-3-carbonitrile; secure] is an insecticide derivate of pyrrole. The mechanism of this drug is by blocking oxidative phosphorylation of mitochondria in nerve system, resulting in inhibition ATP production and cellular death. According to published reports chlorfenapyr intoxication is characterized by CNS involvement, high fever, rhabdomyolysis, diaphoresis, thirsty, abnormal LFT, and death. We present a lethal case after exposure through the skin and inhalation by accident.

Results
50-years-old man with diffuse white matter injury on brain MRI was transferred to ED from another hospital. He presented symptomes of visual disturbance, diaphoresis, thirsty, dysuria and disorientation. He has a history of pour the insecticide on himself while he was working five days ago. After 10 hours his mentality was decreased so we intubated him and tried to sedation, Body temperature was progressively increased and uncontrolled. After 11 hours BP was going up to 250/95mmHg so, we tried labetalol. After a few minutes suddenly BP decreased and he was arrested, Proper ACLS was done but ROSC wasn’t achieved. At the time of expired clarification his body temperature was 42°

Conclusion
Most of fatal chlorfenapyr poisoning developed by ingestion. But we report through this case inhalation and skin exposure can cause a death as well ingestion.