ETHYLENE DIBROMIDE POISONING
HOMICIDE OR SUICIDE

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ABSTRACT
A married lady was admitted to the hospital with the history of forcible ingestion of grain preservative by her in-laws prior to the three days of admission. Symptomatic and supportive treatment was given the lady passed away after two days.

The viscera were sent to the institute for chemical examination. The presence of bromide was determined in the viscera and it was finally decided as a case of Ethylene dibromide poisoning.

The history given by the deceased and the circumstances of admission to the hospital after three days of incidence evolve the suspicion whether it was a case of homicide or suicide. The details are discussed in the paper.

KEY WORDS : Ethylene Dibromide, Poisoning, Silofume, Homicide, Suicide

INTRODUCTION
Ethylene dibromide is a colorless liquid with a distinctive odour usually described as sweet. It has used as soil fumigant for nematodes and to control insects for citrus fruits and grains. It is also used as lead scavenger in gasoline refinement.

It is sold in the market with different names as silofume EDB in the 5 ml glass ampule. The toxic dose varies from 5-10 ml. It causes severe liver and renal damage. Treatment is supportive. Bromide can be identified in urine also.

CASE HISTORY
The deceased was a young lady aged 26 years. As per the dying declaration she was forcibly ingested with the ampule used for wheat preservation by her husband, sister-in-law and Mother-in-law on June 5th 2000 in the morning at 10.30 a.m. After that the sister-in-law of deceased called local doctor who prescribed Digene. The Digene syrup was given to the deceased; she had vomiting and diarrhoea and took rest for 2 hours. In afternoon at 2.30 p.m. the uncle of deceased called local doctor who prescribed Digene. The Digene syrup was given to the deceased; she had vomiting and diarrhoea and took rest for 2 hours. In afternoon at 2.30 p.m. the uncle of deceased came to the house and took her with him in car to the Jabalpur, from Bhopal, the place of incidence. They reached Jabalpur on June 5th 2000. But she remained asymptomatic up to June 7th 2000 i.e. for 2 days nearly 48 hours. She was admitted to the hospital at Jabalpur where she recorded her evidence, was treated for ethylene dibromide poisoning but as the condition deteriorated, she was referred to the main hospital where she expired on June 9th 2000 at 11.30 a.m.

MATERIAL AND METHOD
The viscera consisting of stomach and its contents and pieces of tissues of liver, lung, spleen, kidney, heart and brain was received for analysis.

POSTMORTEM FINDINGS

RESULT AND DISCUSSION
The viscera were found for ethylene dibromide poisoning. Ethylene dibromide in a case of fatal human poisoning resulting from ingestion of 4.5ml of ethylene dibromide, massive centrolobular necrosis of liver and proximal tubular damage in kidney were observed. None of these findings were reported in the present case. EDB also found to rapidly produce highly malignant gastric squamous cell carcinoma in rats and mice.

The cases of ethylene dibromide poisoning are observed for the last 5 years in the state of
Madhya Pradesh especially in Bhopal region. The trend however found in increasing order.

As the number of cases increased drastically from 1 to 11 in preceding years. It indicates that it may further go high with the time.

CONCLUSION

In the present case, the deceased was traveled eight hours from Bhopal to Jabalpur by road and remained asymptomatic for complete two days raise suspicion on the history given by the deceased. It appears rather more convincing that she might have had scuffle with her in-laws at Bhopal and called her uncle and tried to go away, but her in-laws took away her 9 month old son and she alone left for Jabalpur. This may lead to the circumstances which might have provoked her for taking poison afterwards after reaching Jabalpur. Considering all the facts, results and analysis, it excludes the possibility of forcible ingestion of ethylene dibromide at Bhopal five days prior to the death. Deceased was not treated for poisoning neither at Bhopal nor at Jabalpur up to 2 days. In-laws act may be the cause of provocation for her suicidal attempt but this is not homicidal to the extent as reported.

REFERENCES