

Poster Abstracts

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ATTEMPT SUICIDE BY POISONING OF SELF PREPARED ARSENIC TRIOXIDE SOLUTION

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Introduction: Arsenic (As) is a traditional poison throughout ancient times. The name “arsenic” is derived from ars.

Case report: A 43-year-old male was transported minutes after ingestion of 300ml self prepared arsenic. he was alert & conscious but appeared dehydrated tachycardia with heart rate of 122 beats per minute but saturation.

A plastic bottle containing arsenic trioxide solution, as ambulance crews. He produced the solution from he sulfide mineral (As_4S_4) which is a Chinese herb, for a

Figure 1 A plastic bottle containing arsenic trioxide



Figure 2 Dimercaptopropanesulphonate Sodium (DMPS)



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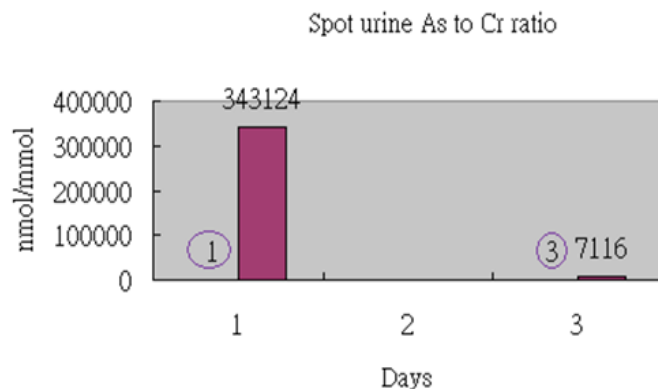


Intra venous fluid replacement for rehydration, decontamination with gastric lavage & subsequent administration of activated charcoal were performed to patient. Chelation therapy with intra-venous dimercaptopropanesulphonate sodium (DMPS), as shown in Figure 2, was given 90 minutes after arrival to hospital. Symptoms of vomiting & diarrhea persisted after admission. He developed lower limbs weakness with severe hypokalemia (potassium level of 2.0umol/L). He regained full power after correction of serum potassium.

24 hours urine arsenic level was found to be 120295nmol/day.

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Figure 3. Spot urine arsenic to creatinine ratio over the patient's clinical course



Seventeen doses of intravenous DMPS were given to patient for 5 days, followed by oral form for 11 days. Spot urine arsenic to creatinine ratio significantly decreased from 343124 nmol/mmol (day 1) to 7116 nmol/mmol (day 3) as shown in Figure 3. He was assessed by psychiatrist and diagnosed recurrent depressive disorder. Toxicology follow up clinic was arranged for him. He had an uneventful course without any neurological deficit.

Conclusion:

Treatment of acute arsenic poisoning includes supportive care, decontamination and chelation therapy. DMPS is an antidote for arsenic poisoning and its use should be directed by clinical status and urinary arsenic excretion.