# 'A-CLASS' IS NOT ALWAYS THE BEST

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INTRODUCTION

Methanol is toxic alcohol commonly used in the industrial setting. Methanol (CH3OH) is water soluble and readily biodegradable, comprising of four parts hydrogen, one-part oxygen and one-part carbon, and is the simplest member of a group of organic chemicals called alcohols. Accidental ingestion and beverage contamination are the common causes of methanol poisoning. Ingested methanol will lead to toxic metabolite formic acid production due to breakdown by enzyme alcohol dehydrogenase and aldehyde dehydrogenase. Accumulation of formic acid will lead to specific end-organ damage.
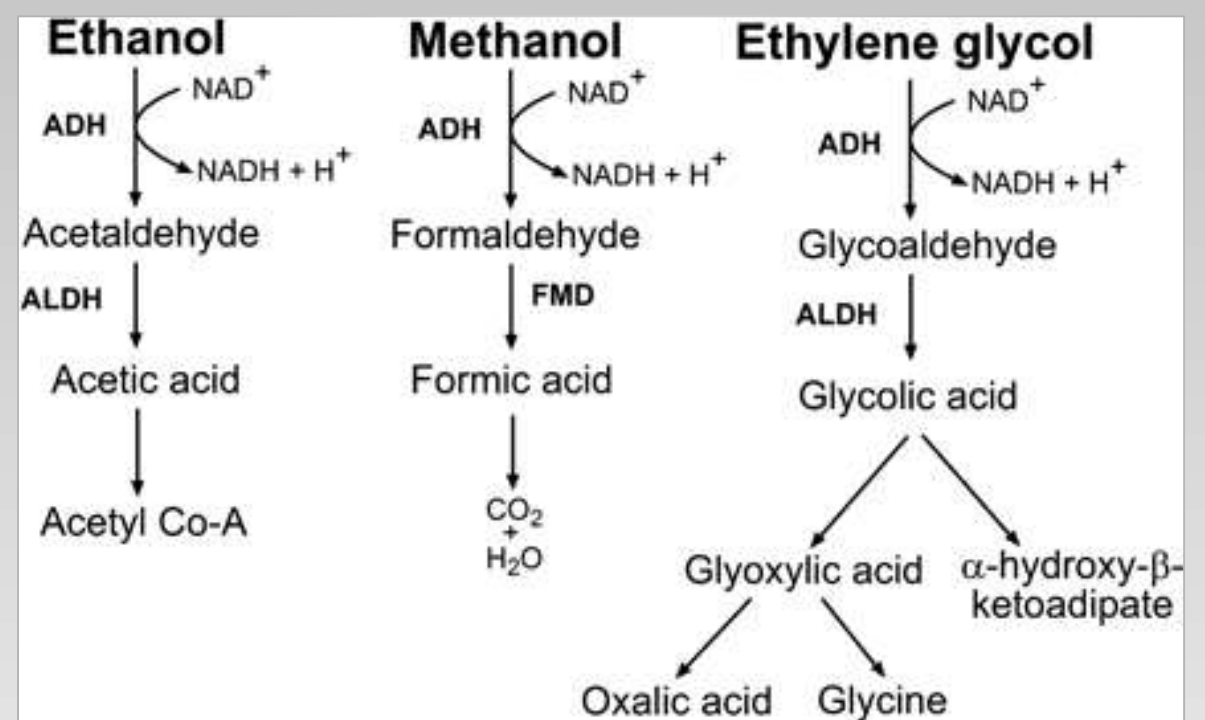
CASE REPORT

We report a series of suspected methanol poisoning cases presented to our Emergency Department (ED) from August to September 2021:

Case 1 – A 32 years old Burmese male presented with sudden onset of blindness. 2 two days after taking a large amount of "A-class" liquor. Pupils 4mm bilaterally fixed. Blood gases showed severe high anion gap metabolic acidosis .

Case 2 – A 36 years old Indian male was found unconscious by his neighbor at home. He developed multiple episodes of seizure and requiring tracheal intubation. "A-class" liquor found in his house. Blood investigation showed severe high anion gap metabolic acidosis and requiring sustained low-efficiency daily dialysis (SLEED).

Case 3 – A 25 years old Indian male brought by family members due less responsive. The patient subsequently had cardiac arrest and multiple episodes of seizure. Family revealed patient had taken numerous bottles of cheap alcohol before that. Blood investigation also showed severe high anion gap metabolic acidosis and requiring sustained low-efficiency daily dialysis (SLEED).

DISCUSSION

The presentation of toxic alcohol poisoning is typical; however, we met a few issues and challenges in managing these cases in a non-tertiary centre.

Firstly, the unavailability of blood methanol level test at our centre and the long distance from the laboratory with available test pose difficulty in confirming the diagnosis.

Apart from that, patient and family's confusion of usual alcohol intoxication symptoms causing a delay in seeking medical attention. The timing of treatment given will influence the outcome, and further delays will lead to severe symptoms and irreversible damage.

Notifying suspected methanol poisoning is essential to alert other authorities to investigate and take necessary prevention steps. Strict force by authorities also needed in prevent futher damage and recurrent case occurs.

CONCLUSION

Good history taking and clinical examination play an important role in diagnosis and early intervention for the suspected case. In addition, early prevention and strict law enforcement will avoid the recurrence of cases in the community.

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