Reviewer’s report

Title: Fatal accidental methanol ingestion

Version: 4 Date: 19 August 2009

Reviewer: Graham Jones

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This is an interesting case report of a young man who ultimately died from a methanol overdose, despite good medical treatment. While reports of methanol poisoning are far from unusual, this report may be of some interest to some and a reminder of the key symptoms of the initial presentation of methanol poisoning. The following observations/comments are offered (all could be classified as "minor", except where noted).

1. More information should be included in the Abstract, such as the measured methanol concentration (4.4 g/l) and the initial anion gap and osmolar gap. The authors should bear in mind that the Abstract is often all that the reader may see in order to judge whether they need to obtain a copy of the full paper.

2. Near the end of the Case Report section, the authors refer to a “document with a negative toxicology screen for alcohol and drugs”. While this is mildly interesting - especially given that the drug screen included methanol (one assumes this was some type of certification that the person was drug and alcohol-free at the time of hiring by the shipping company?) - it is largely irrelevant as the testing was presumably performed long before the ship left its original port. This reviewer questions whether it is necessary to include a copy of this document as a Figure. (Discretionary)

3. Immediately before reference to the drug screen document, the authors refer to a high osmolar gap of “77” mOsmol/Kg. However, the calculations further down that page show a value of 73 mOsmol/Kg. Is the figure of “77” incorrect?

4. In the Discussion, it is stated that the first roughly estimated maximum methanol concentration was 2.5 g/Kg (presumably in serum?). Later, they refer to a laboratory measured value of 4.4 g/L. It is acknowledged that one value was estimated based on an Osmolar gap and the other measured directly, but the discrepancy does seem to be remarkably large. It would be useful to the reader if the authors could discuss possible reasons for the difference.

5. Can the authors state how the 4.4 g/l methanol was measured? Was it by gas chromatography or another method?

6. In the Conclusions, the authors state that “methanol intoxication alone is no contraindication for organ donation”. While this may be true in most circumstances, it does not appear to be based on anything the authors have presented in their report. (Discretionary)
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'