



CASE REPORT

Methanol poisoning among travellers to Indonesia



Franco Giovanetti*

Azienda Sanitaria Locale CN2 Alba Bra, Dipartimento di Prevenzione, via Vida 10, 12051 Alba, Italy

Received 15 December 2012; received in revised form 7 March 2013; accepted 14 March 2013
Available online 6 April 2013

KEYWORDS

Methanol;
Poisoning;
Blindness;
Travellers;
Indonesia

Summary *Background:* Common Travel Medicine sources generally do not provide information on the risk of methanol poisoning among travellers who visit Indonesia. The aim of this analysis was to increase knowledge on this topic through reports from bibliographic databases and Internet sources.

Methods: Case reports and studies on methanol poisoning in Indonesia were retrieved through PubMed, Embase and Google Scholar database searching.

The Google search was used to retrieve the Web Media articles reporting fatal and non-fatal methanol poisoning in Indonesia, in a timeframe from 01.01.2009 to 03.03.2013.

Results: Three case reports of methanol poisoning involving four travellers to Indonesia were found in bibliographic databases. The media sources searching identified 14 articles published online, reporting 22 cases of methanol poisoning among travellers after consumption of local alcohol beverages. The total number of death cases was 18. Some sources report also a large number of cases among the local population.

Conclusions: Methanol poisoning is likely to be an emerging public health problem in Indonesia, with an associated morbidity and mortality among travellers and local people. Some strategies can be implemented to prevent or reduce harm among travellers.

© 2013 Elsevier Ltd. All rights reserved.

Introduction

Accidental methanol ingestion is a cause of illness and even death both in developed and developing countries.¹ Methanol poisoning is occasionally reported among international

travellers and can be considered one of the potential risks associated with a travel abroad. Some recent reports from governmental sources are of concern since they indicate methanol poisoning as a possible emerging problem in Indonesia. The Foreign and Commonwealth Office (UK),² the Irish Department of Foreign Affairs and Trade,³ the Australian Department of Foreign Affairs and Trade,⁴ and the New Zealand Ministry of Foreign Affairs and Trade⁵ warn that in recent years some deaths and cases of serious illness

* Tel.: +39 0173 316 619; fax: +39 0173 316 636.

E-mail addresses: fgiovanetti@aslcn2.it, giovanetti58@alice.it.

among tourists visiting Indonesia have been caused by drinking local spirits, such as arak, spiked with methanol.

It is difficult to access detailed and timely information on the risk of methanol poisoning among travellers who visit Indonesia. Authoritative Travel Medicine sources generally provide little or no information on this topic. The US Center for Disease Control and Prevention does not mention methanol poisoning neither in the Yellow Book⁶ nor on the Travellers' Health website.⁷ There is no information regarding this issue on the WHO Travel and International Health website.⁸ On 20 September 2012, the UK National Travel Health Network and Centre (Nathnac) reports a methanol poisoning in Czech Republic, but does not provide any information about the situation in Indonesia.⁹ A Pro-MED Mail (keywords "methanol" AND "poisoning") search provided 41 results for the period from 14.01.1999 to 16.02.2012 with only one report from Indonesia, describing a suspected case of methanol poisoning in an Australian rugby player, who died in Bali in September 2011.¹⁰ No further reports are available on Pro-MED Mail after 16.02.2012 (latest access 03.03.2013).

The aim of this analysis was to increase knowledge on this topic through bibliographic database reports and Internet media sources.

Methods

The PubMed, Embase and Google Scholar searches were conducted using a combination of searching keywords "Indonesia", "Methanol", "Poisoning", "Intoxication".

Moreover, a search on Google was performed with the same keywords (timeframe from 01.01.2009 to 03.03.2013), focussing exclusively on media sources. This search also included websites in French (keywords "Indonésie", "méthanol", "empoisonnement") and in German (keywords "Indonesien", "Methanolvergiftung").

Results

Three case reports of methanol poisoning involving 4 travellers to Indonesia were found in bibliographic databases.

Case n. 1

A 17-year-old Australian woman drank about two litres of Arak during a party in Bali, where she was on holiday. Initially, she developed gastrointestinal symptoms (nausea, vomiting and abdominal pain), as well as dyspnoea and blurred vision. Within 24 h a complete and bilateral loss of vision occurred. During the next days, vision improved spontaneously in the left eye only. Eventually, the patient sought medical attention on return in Australia, where an ophthalmologic examination found a bilateral optic disc hyperaemia and venous engorgement, together with a large scotoma in the right eye. Four years later, the patient showed bilateral optic atrophy with a right central scotoma. The corrected visual acuity was 6/6 on the left eye, whereas on the right eye the visual acuity was counting fingers with complete loss of colour vision.¹¹

Case n. 2

A French 37-year-old scuba-diving instructor living in Bali, developed abdominal pain, diarrhoea, polyneuritis in both legs and visual failure. A thorough examination excluded infections, immune or demyelinating disease.

Visual acuity was counting fingers in both eyes. A sample of a beverage he drunk before the symptoms was positive for methanol. Three months later, visual loss persisted and the fundus examination revealed a bilateral optic atrophy.¹²

Case n. 3

A French 50-year-old man had an acute bilateral vision loss few days after consumption of an alcohol beverage in Bali. The fundus examination showed bilateral optic atrophy. Clinical investigation excluded other possible causes.¹²

Case n. 4

A 19-year-old woman was admitted to an Emergency Department in New Zealand with visual loss and tachypnoea, shortly after her arrival from a trip in Indonesia. She had dilated and unreactive pupils, a disc pallor at fundus examination, tachycardia, high blood pressure and a severe metabolic acidosis. Her methanol blood level was 17.3 mmol/L, whereas ethanol was undetectable. The patient reported that more than 35 h before, she drank 8–10 arak-based cocktails in two tourist bars in Denpasar, Bali. The patient recovered from metabolic acidosis, but her visual acuity, after an initial improvement, worsened significantly to 6/90 on the right eye and 6/120 on the left eye and this condition is considered unlikely to be improved in the future.¹³

The Google search on media sources identified 14 articles published online from 01.01.2009 to 03.03.2013, describing 22 cases of methanol poisoning among travellers after consumption of local alcohol beverages. Total deaths were 18.

In 2009 two articles reported the death of 4 tourists in Bali, Gili Islands and Lombok, related to a cluster of methanol poisoning. The 4 tourists were an Irish 25-year-old woman, her Dutch boyfriend, a British citizen, who lived in Bali, and a woman of British origin, residing in Phoenix, Arizona.^{14,15}

In 2010, the death of 3 Russian technicians was reported in South Sulawesi.¹⁶

Some articles report 9 cases occurred in 2011: a nurse from Newcastle, Australia,¹⁷ a New Zealand rugby player,¹⁸ a German woman from Aachen,¹⁹ an Irish woman,²⁰ a Swedish man²¹ and 4 Russian sailors in South Kalimantan.¹⁶ The Australian nurse only survived, although bearing some Central Nervous System disorders. The case of the Australian rugby player is the same described in the above mentioned post on the Pro-MED Mail.

In 2012, two deaths were reported: a 28-year-old Swede on Gili Trawangan (a little island near Lombok island)²¹ and a Japanese man living in Jimbaran¹⁶; moreover, one article²² reports the case of permanent blindness already quoted in this paper as the "Case n. 4",¹³ while another

Download English Version:

<https://daneshyari.com/en/article/3393051>

Download Persian Version:

<https://daneshyari.com/article/3393051>

[Daneshyari.com](https://daneshyari.com)