

- Wernicke's encephalopathy (WE) is a serious yet reversible sequelae of alcoholism resulting from profound thiamine depletion
- Untreated, up to 20% of cases result in fatality, and 85% of survivors develop irreparable brain damage, i.e. the Korsakoff syndrome

The Banana Bag: Small Potatoes against Wernicke's Encephalopathy

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Case Description



Hospitalization #2							
11	12	13	14	15	16	17	18
ed within 48 hrs with encephalopathy							
a + new findings of lateral gaze palsy,							
ation, and nystagmus							
					165	21114	3
JDS MRI findings of							A
	Wernicke's						
encephalopathy						N.	
						1.2.	
ated for WE with 500mg IV thiamine daily							
n rapid res	solution of	symptom					

Diagnosis

Usually a clinical diagnosis

Neuroimaging has a limited role: Head CT offers negligible detection MRI only 53% sensitive

Findings suggestive of WE include increased signaling in mamillary bodies, periaqueductal area, and thalamus

Treatment

- For high-risk patients (i.e. alcoholics) presenting with encephalopathy:
 - Thiamine 250mg IM/IV daily for 3-5 days (banana bags do not suffice)
- If a definitive diagnosis of WE is established:
 - Thiamine 500mg IM/IV daily for 2-3 days, then 250mg daily for 3-5 days, then daily supplementation





- Wernicke's encephalopathy often manifests as encephalopathy alone, without cerebellar ataxia or ophthalmoplegia
- Although MRI neuroimaging may support a diagnosis of WE, it should not be used to exclude a diagnosis of WE given its low sensitivity
- Patients at high-risk for WE warrant high-dose thiamine repletion when presenting with encephalopathy – "banana bags" do not suffice

References

- Kopelman M, Thomson A, Guerrini I. "The Korsakoff Syndrome: Clinical Aspects, Psychology and Treatment.' Alcohol & Alcoholism. Vol. 44, No.2, pp. 148-154, 2009.
- G, Pipitone N. "Neuroimaging Findings in Acute Wernicke's Encephalopathy: Review of the Literature." American Journal of Roentgenology. Vol. 192, Feb 2009.
- Thomson A, Guerrini I, Marshall E. "Wernicke's Encephalopathy: Role of Thiamine." Practical Gastroenterology. Series 75, pp. 21-30, 2009.
- Martin PR, Singleton CK, Hiller-Sturmhöfel S. "The role of thiamine deficiency in alcoholic brain disease." Alcohol Res Health. 2003; 27:134.
- Heap LC, Pratt OE, Ward RJ, et al. "Individua susceptibility to Wernicke-Korsakoff syndrome and alcoholism-induced cognitive deficit: impaired thiamine utilization found in alcoholics and alcohol abusers." Psychiatr Genet. 2002; 12:217.