Lost in Time: Navigating Transient Global Amnesia
A Clinical Case Exploration

Scott Kirby D.O., Isabela Caulkins OMS-4
Carl T. Hayden Veterans' Administration Medical Center, Midwestern University
Phoenix, AZ

Introduction

Transient Global Amnesia (TGA) is a rare and intriguing neurological phenomenon characterized by acute anterograde amnesia lasting less than 24 hours. Its transient nature, along with the absence of definitive risk factors or causes, presents significant clinical challenges in diagnosis and management. This poster presentation explores a recent case of TGA in a middle-aged patient with chronic low back pain, emphasizing the clinical presentation, diagnostic difficulties, and the critical need for continued research to improve our understanding of this enigmatic condition.

Case Report

Transient Global Amnesia (TGA) presents a clinical challenge due to its transient nature and the lack of definitive risk factors or causes. It is characterized by acute anterograde amnesia that lasts less than 24 hours. In a recent case, a middle-aged patient with chronic low back pain exhibited repetitive questioning and complete anterograde memory loss, prompting suspicion of TGA. Despite normal neurological exam findings and unremarkable imaging studies, the patient experienced recurring episodes of anterograde amnesia every 10-15 minutes, which resolved spontaneously within 24 hours.
This case underscores the critical need for thorough evaluation and the exclusion of alternative diagnoses, as TGA remains a diagnosis of exclusion in clinical practice. Ongoing research is essential to deepen our understanding of TGA's triggers, risk factors, and potential preventive strategies, highlighting the intricate nature of this condition and the importance of continued exploration in neurology.

References

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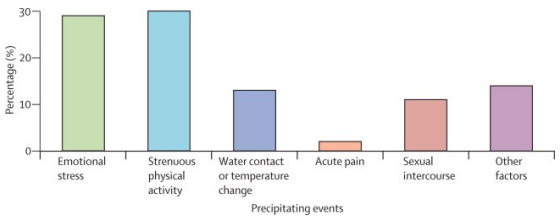
	TGA (total number of patients)	TGA patients with complete MRV study	Control subjects with complete MRV study
	n = 79	*n* = 45	*n* = 45
DEMOGRAPHIC			
Age	61.4 ± 8.7 (32–85)	61.5 ± 8.7 (35–85)	61.5 ± 8.7 (35–85)
Gender (M/F)	57/24	19/26	19/26
Coronary artery disease	2 (2.5%)	1 (2.2%)	0 (0%)
Hyperlipidemia	5 (6.3%)	3 (6.7%)	2 (4.4%)
Hypertension	8 (10.1%)	4 (8.9%)	5 (11.1%)
Diabetes mellitus (DM)	4 (5.0%)	2 (4.4%)	1 (2.2%)
Headache with cough	7 (8.8%)	4 (8.9%)	0 (0%)
Mitral valve prolapse (MVP)	6 (7.6%)	3 (6.7%)	2 (4.4%)
Sleep apnea syndrome (SAS)	2 (2.2%)	1 (2.2%)	0 (0%)
Syncope	5 (6.3%)	3 (6.7%)	0 (0%)
Insomnia	3 (3.8%)	1 (2.7%)	0 (0%)
Glaucoma	5 (6.3%)	2 (4.4%)	0 (0%)
Carotid stenosis	1 (1.3%)	0 (0%)	0 (0%)
MCA stenosis	5 (6.3%)	3 (6.7%)	0 (0%)
Previous stroke	3 (3.8%)	1 (2.2%)	0 (0%)
CLINICAL PROFILES OF TGA			
Recurrent	35 (44.3%)	21 (46.7%)	
Duration of amnesia (hours)	7.9 ± 8.3 (0.2–14)	7.5 ± 7.9 (0.2–11)	
VM–like activities or precipitating factors, *n* (%)	26 (32.9%)	16 (35.6%)	

TGA, Transient Global Amnesia.

Patient demographics and medical history detailing episodes of Transient Global Amnesia (TGA).



Comparison of commonality of triggers for episodes of TGA

Discussion

Transient Global Amnesia (TGA) presents a clinical challenge due to its transient nature and lack of definitive risk factors or causes. It is characterized by acute anterograde amnesia lasting less than 24 hours. In a recent case, a middle-aged patient with chronic low back pain exhibited repetitive questioning and complete anterograde memory loss, raising suspicion of TGA. Despite a normal neurological exam and unremarkable imaging studies, the patient experienced memory deficits recurring every 10-15 minutes, which resolved spontaneously within 24 hours.
This case underscores the importance of thorough evaluation and the need to exclude alternative diagnoses, as TGA is a diagnosis of exclusion in clinical practice. Ongoing research is essential to improve our understanding of TGA's triggers, risk factors, and prevention strategies, emphasizing the complexity of this condition and the need for continued exploration in neurology.

Summary and Conclusions

Transient Global Amnesia (TGA) is a perplexing neurological condition characterized by the sudden onset of anterograde amnesia. While the condition is rare and generally harmless, its exact cause remains uncertain. Current research is exploring potential mechanisms, including intracranial venous hypertension, focal ischemia, venous flow abnormalities, and metabolic disruptions in CA1 neurons.
Diagnostic tests like EEG and brain imaging often reveal no abnormalities specific to TGA, highlighting the importance of clinical evaluation for diagnosis. Known triggers include physical exertion, emotional stress, and rapid temperature changes, though definitive risk factors are still elusive. The association between TGA and migraines suggests possible genetic or predispositional links. Diagnosing TGA requires ruling out other conditions, such as basilar artery thrombosis. This complexity underscores the need for continued research to better understand TGA's triggers, risks, and causes, with the goal of developing more effective interventions and preventive strategies. TGA exemplifies the intricate nature of neurological disorders and emphasizes the importance of collaboration in medical research.