

## “Whippets”-induced vitamin B12 deficiency and dorsal column degeneration

Haitham Dababneh, MD<sup>\*1</sup>, Mohammed Hussain, MD<sup>\*1</sup>, Waldo R Guerrero, MD<sup>\*4</sup>, Jindong Xu, MD<sup>2</sup>, Walter Morgan, MD<sup>2</sup>, J Mocco, MD, MS<sup>3</sup>, and Jawad F Kirmani, MD<sup>1</sup>

*\*Equal Contribution*

<sup>1</sup>- New Jersey Neuroscience Institute, Seton Hall University, JFK Medical Center.

<sup>2</sup>- Department of Neurology, University of Florida, Shands Hospital.

<sup>3</sup>- Department of Neurosurgery, Vanderbilt University Medical Center.

<sup>4</sup>- Department of Neurology, University of Texas Health Science Center.

*Drs. Dababneh, Guerrero and Hussain drafted and edited the manuscript.*

*Drs. Xu, Morgan and Mocco have edited the article.*

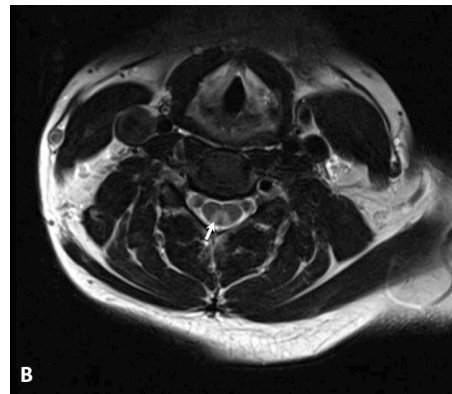
*Dr. Kirmani has revised the article.*

### Case Summary

A 32 year old pregnant woman at 11<sup>th</sup> week gestation presented with 2 weeks of progressive gait difficulty and ascending weakness. Patient admitted to recreational inhalation of nitrous oxide from whipped-cream bulbs “whippets”. On examination, she had mild weakness in her extremities. Laboratory examination was significant for a low serum cobalamin (vitamin B12) level. Furthermore, homocysteine and methylmalonic acid were elevated. Parietal cell and intrinsic factor antibodies were negative. She was started on vitamin B12 injections and transferred to an acute rehabilitation facility.

### Legend

A sagittal T2-weighted magnetic resonance imaging (MRI) scan (Panel A) demonstrated increased signal in the dorsal columns spanning the C2-C6 levels (arrow). An axial T2-weighted MRI scan (Panel B) further illustrated the increased signal within the dorsal columns (arrow).



Published November, 2014.

All Rights Reserved by JVIN. Unauthorized reproduction of this article is prohibited

Corresponding Author: Dr. Haitham Dababneh New Jersey Neuroscience Institute 65 James Street Edison, NJ 08820 Haitham82@gmail.com