

Guillain-Barré Syndrome (GBS) – More Haste, Less Speed

Muhammad Hassan¹, Mazhar Badshah¹, Haris Majid Rajput¹, Waleed Shahzad¹, Zakir Jan¹, Naveed Ullah Khan¹, and Rebecca Susan Dewey²

¹Shaheed Zulfiqar Ali Bhutto Medical University

²University of Nottingham Faculty of Medicine and Health Sciences

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Abstract

Objective: Many patients being investigated for Guillain-Barré syndrome (GBS) undergo unnecessary neuroimaging with magnetic resonance imaging (MRI) or computed tomography (CT). The objective of this study was to determine the proportion of patients with GBS undergoing neuroimaging investigation, and investigate any association with different GBS variants, and the level of certainty using the Brighton Criteria. **Methods:** A single-center observational study was conducted in Pakistan's leading tertiary care hospital, that enrolled 148 patients being investigated for, and subsequently diagnosed with GBS between January 2017 and March 2020. Participants were asked if they had undergone neuroimaging of the craniospinal axis before or during hospital admission, and the purpose of any CT scan. We enquired whether fundoscopy had been performed before lumbar puncture and determined the level of certainty based on the Brighton Criteria. **Results:** The majority of participants were male (n=107; 73%), with a mean± SD age of 42.85±18.4 years. The mean waiting time to their first interaction with a neurologist was 5.2±4.01 days, and the demyelinating variant of GBS was more common than the axonal variant (1.6:1). Most patients were diagnosed with level I certainty using the Brighton criteria (n=113; 76%). MRI brain and spine were performed ahead of admission in 48 (32%) and 59 (39%) patients, respectively. CT scan brain was performed in 121 (82%) patients before lumbar puncture while 27 (18%) only underwent fundoscopic examination before lumbar puncture. **Conclusion:** Clinical examination is fundamental in the diagnosis of GBS. Neuroimaging may be inappropriate and unnecessary, and detract attention from crucial peripheral neuropathy measures while misusing limited resources. **Keywords:** Guillian Barre Syndrome; Neuroimaging; Brighton Criteria

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Muhammad Hassan^{1,3}, Mazhar Badshah^{1,4}, Haris Majid Rajput^{1,5}, Waleed Shahzad^{1,3}, Zakir Jan^{1,5}, Naveed Ullah Khan^{1,3}, Rebecca Susan Dewey^{2,6}

¹ Shaheed Zulfiqar Ali Bhutto Medical University (SZABMU), Islamabad, Pakistan.

² University of Nottingham, United Kingdom (UK)

³ Resident Neurologist, Department of Neurology, SZABMU

⁴ Professor, Department of Neurology, SZABMU

⁵ Assistant Professor, Department of Neurology, SZABMU

⁶ Clinical Neuroimaging Fellow, University of Nottingham, UK

Corresponding Author:

Name of Corresponding Author: Dr. Muhammad Hassan

Department of Neurology, SZABMU, Islamabad

Email ID: drhassaanshafqat2011@gmail.com

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- Authors' contributions

Sr	Name	Contribution	Emails
1	Muhammad Hassan	concept, data collection, manuscript writing, manuscript review	drhassaanshafqat2011@gmail.com
2	Mazhar Badshah	concept, manuscript review	drmb43@gmail.com
3	Haris Majid Rajput	manuscript writing, manuscript review	harismajid@gmail.com
4	Waleed Shahzad	data collection, manuscript writing	valeed@live.com
5	Zakir Jan	Final Approval and Critical writing	drzakirjan@gmail.com
6	Naveed Ullah Khan	manuscript writing, manuscript review	Naveed733@yahoo.com

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