

CASE REPORT

Labrune's Syndrome Presenting With Stereotypy-Like Movements and Psychosis: A Case Report and Review

Chun-Yang Sim,¹ Shahizon Azura Mohamed Mukari,² Lock-Hock Ngu,³
Chia-Yin Loh,⁴ Rabani Remli,⁵ Norlinah Mohamed Ibrahim⁵

¹Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, Kota Samarahan, Malaysia

²Department of Radiology, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

³Department of Genetics, Kuala Lumpur Hospital, Kuala Lumpur, Malaysia

⁴CENTOGENE GmbH, Rostock, Germany

⁵Department of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

ABSTRACT

Labrune's syndrome, or leukoencephalopathy with brain calcifications and cysts (LCC), is a rare genetic syndrome with variable neurological presentations. Psychiatric manifestations and involuntary movements are uncommonly reported. We report the case of a 19-year-old female, initially diagnosed with Fahr's syndrome, who presented to us with acute psychosis, abnormal behavior and involuntary movements. Her brain computed tomography showed extensive bilateral intracranial calcifications without cysts. Genetic testing detected two compound heterozygous variants, NR_033294.1 n.*9C>T and n.24C>T, in the *SNORD118* gene, confirming the diagnosis of LCC. We discuss the expanding phenotypic spectrum of LCC and provide a literature review on the current diagnosis and management of this rare syndrome.

Keywords Fahr's syndrome; Intracranial calcification; Labrune's syndrome; Malaysia; *SNORD118*.

Leukoencephalopathy with brain calcifications and cysts (LCC) is a rare inherited microangiopathic disorder of the brain first reported in 1996.¹ To this date there are less than 100 cases reported worldwide and the clinical spectrum for this condition is still expanding. There is no established diagnostic criteria for LCC thus, patients are usually diagnosed late. Clinicians rely heavily on serial brain imaging and clinical progression to establish this diagnosis. Here we report the first case of LCC in Malaysia with atypical features and provide a review of this rare condition.

CASE REPORT

A 19-year-old female previously diagnosed with Fahr's syn-

drome and epilepsy, first presented to Universiti Kebangsaan Malaysia Medical Centre in June 2018 with a three-day history of abnormal behavior associated with emotional lability, paranoia, irrelevant speech and a poor sleep pattern. There was gait instability and involuntary movements of her hands, mainly on the right. On examination, she was of short stature, had inappropriate affect, smiled and cried occasionally and did not obey commands. She had irrelevant speech with slurring of words. Neurological examination revealed no deficits or signs of meningism. There were choreoathetoid movements of her upper limbs (right > left), which appeared stereotyped and mimicked a traditional Malay dance movement (Supplementary Video 1 in the online-only Data Supplement). Brain computed tomog-

Received: August 16, 2021 Revised: September 25, 2021 Accepted: October 19, 2021

Corresponding author: Norlinah Mohamed Ibrahim, MRCP

Department of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latiff, Bandar Tun Razak, Kuala Lumpur 56000, Malaysia / Tel: +6012-2145306 / Fax: +603-91456640 / E-mail: norlinah@ppukm.ukm.edu.my

© This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<https://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.