

Pitt-Hopkins Syndrome – A Case Report from Pakistan

Asghar Nasir

Department of Pathology and Laboratory Medicine, Aga Khan University, Karachi, Pakistan

Bushra Afroze

Department of Paediatrics and Child Health at Aga Khan University, Karachi, Pakistan

Saad Ilyas

Aga Khan University, Karachi, Pakistan

Zeeshan Ansar

Department of Pathology and Laboratory Medicine, Aga Khan University, Karachi, Pakistan

Dr. Zahra Hasan PhD*

Professor and Consultant, Section of Molecular Pathology, Department of Pathology and Laboratory Medicine, The Aga Khan University, Stadium Road, Karachi 74800, Pakistan

Abstract:

Pitt-Hopkins syndrome (PTHS) is a rare neurodevelopmental disorder caused by loss of function of one allele of the Transcription Factor 4 (*TCF4*) gene. We present the first case report from Pakistan where Chromosomal Microarray (CMA) was utilised for diagnosing PTHS. Haploinsufficiency of *TCF4* gene located at 18q21.2 region was identified by CMA. Haploinsufficiency in the *TCF4* has an important role in the development of the nervous system and the ability of the protein to bind to DNA and initiate neuronal differentiation, contributing to the neurological symptoms seen in PTHS. We present an overview of the clinical presentation and diagnostic workup, ultimately leading to the diagnosis of PTHS.