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## Dandy-Walker malformation: A case report on the importance of neuroimaging in diagnosis of the disorder

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Dandy-Walker malformation is a rare intracranial congenital abnormality of the brain occurring in about 1 in 35000 live births. It is characterized by a classical neuropathological triad consisting of complete or partial agenesis of the cerebellar vermis, cystic dilatation of the fourth ventricle and enlargement of the posterior fossa. Treatment involves seizure control, ventriculo-peritoneal/cystoperitoneal shunting and psycho-social therapy. Although there is an extensive list of signs and symptoms associated with the disorder, final diagnosis is dependent on imaging techniques. Timely neuroimaging helps to diagnose the condition and the associated anomalies as early as possible. It also helps to evaluate the recurrence risk in subsequent pregnancies with timely diagnosis of the present disorder. A male child of age two years was brought to our institution for chronic seizure disorder since seven months of age in the out-patient department. He began to have progressive increase in head circumference since one year of age, limited cognition and motor skills for his age and had repeated hospital admissions for convulsions. Cranial CT scan with contrast and plain cranial MRI both revealed moderate hydrocephalus with cystic enlargement of the fourth ventricle communicating into a large cystically dilated posterior fossa, absent cerebellar vermis and absent septum pellucidum along with

hypoplastic cerebellum and polymicrogyria. A diagnosis of Dandy-Walker malformation was made, and treatment was advised accordingly, including anticonvulsants and need of ventriculo-peritoneal shunting, to which the family consented to on a lateral date, after out-patient follow up. In the absence of any antenatal and postnatal neuroimaging modality, the case was being managed in line of hydrocephalus with chronic seizure disorder. With the availability of cranial CT scan study, a definite diagnosis of Dandy-Walker malformation could be made and further management could be planned.

### Speaker Biography

Bista N has completed her MBBS at the age of 26 years from Manipal College of Medical Sciences, Kathmandu University, Nepal on November 2015. She is currently pursuing her residency training in radiology at the Bicol Medical Center, Naga City, Philippines. She is to share her interesting cases and looks forward to being actively involved in publication and further enhancing her academics and training.

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