Cerebral Venous Thrombosis in Adults: An Experience from a Tertiary Teaching Hospital in Dharwad, Karnataka

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ABSTRACT

Background and objectives: Cerebral venous thrombosis is not an uncommon cause of stroke in our country, especially in the young. The symptoms and clinical course are highly variable. Because of its diverse presentation and unpredictable clinical outcome, it remains diagnostic challenge for treating Physicians/neurologists. With increasing awareness of this entity and easily accessible advanced neuroimaging techniques like magnetic resonance imaging (MRI) and magnetic resonance venogram (MRV), cerebral venous thrombosis (CVT) cases are now being diagnosed more frequently such that it occurs more commonly than previously assumed. CVT is more common in under developed countries and is one most common cause of stroke in young in India. Though several studies were done in India and elsewhere on CVT, it has not been extensively studied of late. The objective of the study is to study the clinical profile of CVT.

Method: 50 consecutive patients admitted in medicine wards at SDM College of medical sciences and hospital, Dharwad between April 2009 and March 2010 with radiologically confirmed diagnosis of CVT were included into the study. Detailed history, clinical examination, laboratory investigations were carried out in all the cases.

Results: Out of the 50 patients of CVT studied, 21 were males and 29 were females. Maximum incidence was seen in 21-30 age group comprising 54% of the cases with mean age being 29.52 years. 2/3rd of the patients belong to low socioeconomic class. Majority of them had sub acute presentation with headache in 66%, followed by convulsions (56%) and altered sensorium (46%) being the most common presenting symptoms. Radiologically the most common finding noted was haemorrhagic infarction (56%), followed by nonhaemorrhagic infarction (44%). The most common sinuses to be involved were superior saggital sinus (76%) followed by transverse sinus (38%). The most common risk factors identified were postpartum and anaemia in females, where as in males they were dehydration and alcohol. Mortality was 8% in the present study.

Conclusions: Cerebral venous sinus thrombosis is a challenging condition because of its variability of clinical symptoms and signs. A high index of clinical suspicion is needed to diagnose CVT. Because of the availability of advanced neuroimaging techniques now, CVT is being more readily recognized in both sexes and in all age groups. Apart from postpartum, dehydrated and alcoholic individuals are at high risk for developing CVT. Magnetic resonance imaging with venography is the diagnostic modality of choice in suspected individuals. When the acute stage of illness has been survived, CVT has a good prognosis unlike arterial ischemic stroke.

Keywords: Cerebral Venous Thrombosis, Postpartum, Neuroimaging