

6th World Conference on
NEUROLOGY AND NEUROSURGERY
&
2nd World Congress on
OBSTETRICS AND GYNECOLOGY

March 27-28, 2019 | Paris, France

Ultrasonography (USG) in neurocritical care

Prasanna Udupi Bidkar¹, Gyanendra Pal Singh², Debendra Kumar Tripathi²

¹Jawaharal Institute of Postgraduate Medical Education and Research, India

²All India Institute of Medical Sciences, India

In the recent years Ultrasonography (USG) has emerged as a valuable tool in intensive care. It has moved successfully from radiological suite to operation theatre and intensive care unit. The main advantages of USG are as a point of care (bed-side) tool which provides vital information. It has many diagnostic and therapeutic applications in the Neurointensive care unit. The main applications of USG in Neurocritical care are as follows. In diagnosis of intracranial hypertension: Increased Optic nerve sheath diameter is a qualitative marker of raised intracranial pressure. A linear high frequency probe can be used for visualization of optic nerve. Transcranial Doppler: TCD has been used in recognition of cerebral autoregulation, diagnosis of cerebral vasospasm and as an ancillary tool in the diagnosis of brain death. USG have been found to be useful in dissolution of clot in cerebral vessels when used in conjunction with thrombolytic agents. Many patients with subarachnoid hemorrhage have cardiac dysfunction. Bed side echocardiography can be used to diagnose cardiac dysfunction. In sitting position craniotomy: Transesophageal echocardiography can be used for the detection of patent foramen ovale

and monitoring of venous air embolism. Traumatic brain injury and other associated injuries: USG can be used for detection of pupillary reaction to light in patients with orbital edema. These patients can have associated injuries like pneumothorax, which can be detected by USG. Deep venous thrombosis (DVT) monitoring: Critically ill neurological patients are at high risk of DVT. USG can be used for monitoring of DVT.



Biography

Prasanna Udupi Bidkar is practicing Neuroanaesthesiology for more than 15 years. He has completed his DM Neuroanaesthesiology from prestigious AIIMS, New Delhi, India. He is presently the treasurer of Indian Society of Neuroanaesthesiology and critical care (ISNACC). He is in editorial board of Journal of Neuroanaesthesiology and critical care. He has more than 30 publications. He is a reviewer of many national and International Journals.

drprasannabidkar@gmail.com