To Date Pediatric Neuroendoscopy

(After more than two decades of intense experience)

The interaction between the sets of command of the given morbid anatomy, experience or amount of variables seen and the available endoscopic tools produce a competent and wise enough “neuroendoscopic” surgeon. The anomalies of the dilated cerebral ventricles/cisterns extend from port to exit. The level of obstruction, extent of dilatation and the shapes assumed by the ventricular system in hydrocephalus both dictate the suitable neuroendoscopic procedure/s and what to do when.

Whether to persevere or convert to the microscope? Is it doable or not? Which part of the surgery can be done totally by the endoscope or the endoscope assisted/controlled microsurgical techniques without the pendulum carrying away the surgeon to either extremes. This is the message and the value of the guidelines for such an important topic. The preaching of neurosurgical trainees is the target and for them to further grasp the concept. Being minimally invasive has become a must but not on the expense of the well being and the outcome of the patient. .

Since September 1993 one thousand six hundred and seventy four cranial endoscopic procedures (endoscopic inspection per se and endoscope controlled microscopic surgeries not included) were performed till March 2014. The overall ratio of pediatric age group : adults were 3:1, varying from endoscopic third ventriculocisternostomy (ETV) 47.5% to septostomy 20.7%,endoscopic shunt procedures 14.9%, arachnoid cysts 7.8%, excision/biopsy 5.4% and restoration 3.7%.

Defining success in neuroendoscopy is a staged process, that starts by accomplishing the mission to be documented later by neuroimaging. The ongoing clinical improvement is a must and comes chronologically thereafter. Results are variable, disease and not feasible procedure related. Prognosis is both inclusion criteria and selection of patients dependent.

One of the crucial factors associated with the surgical team’s level of experience and technical skills is how to deal with these variations and how to complete the procedure/s without aftermaths. Having both a structured preoperative aim, designed separately for each and every case and a contingency plan for the tailored approach will immensely help in decreasing the tedious learning curve of brain endoscopy and reduce its duration. The ability to develop a realistic plan for your endoscopic approach will keep the enthusiasm and minimize any undue frustrations.