

PP22**Subgaleal ventricular-subarachnoid stenting in newborns with posthemorrhagic hydrocephalus**

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Pediatric neurosurgery actual task is the liquoro-dynamic correction due to secondary post-hemorrhagic hydrocephalus combined non-traumatic (spontaneous intraventricular-subarachnoid hemorrhage) and traumatic genesis.

Newborn post-hemorrhagic hydrocephalus neurosurgical treatment method was suggested and special ventricular-subarachnoid stent was invented and proved (Certificate in Copyright Law, pattern № 45865 from 02.10.2012., Ukraine).

Eighteen emergency neurosurgical operations to newborns with post-hemorrhagic hydrocephalus were performed with there minimal gestation 25-26 weeks. It's algorithm including subgaleal (subcutaneous) ventricular-subarachnoid drainage with following shunting via ventricular-subarachnoid stent to restore the physiological liquor circulation. Post-operative quantity criteria include: neurological anamnesis, ophhtalmoscopy, enolase (S-100 protein) laboratory blood figures, neuro-imaging (neurosonography, brain CT-scan and MRI).

Subgaleal ventricular-subarachnoid drainage (Certificate in Copyright Law, pattern № 34523 from 11.08.2010., Ukraine) via ventricular-subarachnoid stent support primary effective liquor purification from blood (simultaneous ventricles and subarachnoid space).

Following ventricular-subarachnoid shunting (Certificate in Copyright Law, pattern № 38061, 20.04.2011., Ukraine) support effective liquor outflow from lateral ventricles to subarachnoid space for it physiological reabsorption.

Subgaleal ventricular-subarachnoid stenting let to reduce the need for ventricular-peritoneal shunting with shunt-depend condition and high risk of it dysfunction and decrease time of recovery treatment.