NEO CAPSULE

NEUROLOGICAL EXAMINATION OF THE NEWBORN

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Abstract: *Neurological examination of the newborn remains a fundamental component of neonatal assessment despite advances in neuroimaging and neurophysiological investigations. It is a cost-effective, time-efficient and immediately actionable bedside tool that provides critical insights into neurological integrity, maturation and early dysfunction. The neonatal nervous system is developmentally dynamic and neurological findings vary significantly with gestational age, postnatal maturation, behavioral state and clinical condition. Unlike older children, neonatal neurological assessment relies predominantly on observation of spontaneous behavior, posture, tone, reflexes and responses to sensory stimuli, supplemented by targeted examination maneuvers. This review outlines a structured and systematic approach to the neonatal neurological examination, emphasizing the importance of clinical history, accurate gestational age assessment and serial examinations.*

Keywords: *Neurological examination, Behavioral state, Passive tone, Active tone, Primitive reflexes*.

Points to Remember

- ***Neonatal neurological examination remains an essential bedside tool, providing immediate assessment of neurological integrity.***
- ***Interpretation must always be contextualized to gestational age, behavioral state and clinical condition.***
- ***Observation forms the cornerstone of neonatal neurological assessment, with posture, spontaneous movements, tone, alertness and reflexes offering critical insights.***
- ***Hammersmith neonatal examination is a structured tool for neurological assessment for term neonates and preterm infants at term corrected age.***
- ***Modified Sarnat examination allows to grade the severity of encephalopathy and assess eligibility for therapeutic hypothermia.***

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