

Neurodevelopment and Primitive Reflexes: a Neuropsychological Approach in Neuroscience

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• Evolutionary psychology • Neuroanatomy • Neurochemistry • Neuroendocrinology • Neuroscience • Psychoneuroimmunology
• Physiological Psychology • Psychopharmacology (Index, Outline). Primitive reflexes are typically present in childhood, suppressed during normal development, and may reappear with diseases of the brain, particularly those affecting the frontal lobes. In this review we discuss some historical aspects surrounding these reflexes, how they might be elicited and interpreted, and their potential clinical utility in modern neurological practice. In the modern era, with detailed non-invasive imaging and neuropsychological testing widely available, the role of eliciting primitive reflexes may seem limited. The complexity of many of these responses makes it perhaps unsurprising that detailed anatomical localisation, despite the availability of structural and functional imaging, has in general not been possible. Primitive reflexes are normal in the infant; however, when present in an adult it becomes concerning for a frontal lobe lesion. this is also known as frontal release signs. examples of frontal release signs include. In a newborn it is normal to see upgoing toes. this is secondary to non-complete myelination of descending cortispinal tracts. A normal finding in adults is plantar flexion. a present Babinski is suggestive of an upper motor neuron lesion. Grasp. When placing a finger or stroking the palm in the newborn the hand flexes. Appears. birth.