

## Module IV

### Module IV: The Pyramidal Distribution of Weakness; *Understanding the Stroke Antalgia:*

Do you know the **pyramidal distribution of weakness (PDW)** display? Do you know what it is and how to recognize it? You should, because it is probably the most common condition in your practice. It is otherwise known as a *stroke antalgia*. You probably treat patients with this pyramidal display every day.

Learn to detect and properly treat the soft signs of PDW before it becomes plasticized—before it becomes more entrenched.

Further, the process of rehabilitating the soft signs of PDW is keenly important. Treated wrongly, there is a high probability that your patients will continue working themselves right into their dysfunctional physiological postures despite your very best efforts.

Like the modules before it, this class advances the physiological reflex display and blends the cerebellar and thalamic applications to better understand the PDW and its autonomic concomitants.

*Neurological hard signs refer to impairments in basic motor, sensory, and reflex behaviors. In contrast, “soft” neurological signs (SNS) are described as non-localizing neurological abnormalities that cannot be related to impairment of a specific brain region or are not believed to be part of a well-defined neurological syndrome.*

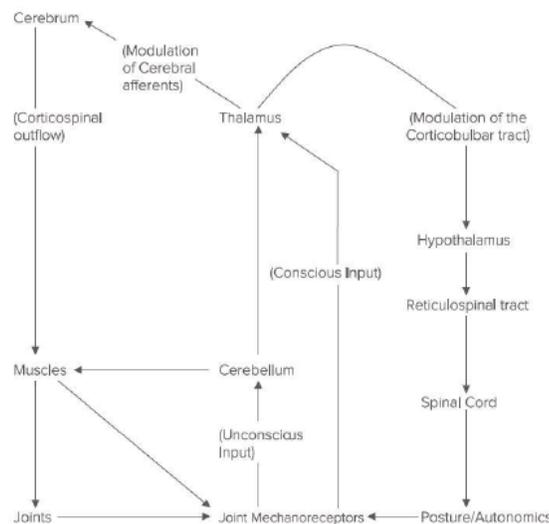
*Neurological soft signs (NSS) are minor (“soft”) neurological abnormalities in sensory and motor performance identified by clinical examination. They have been described in excess in patients with schizophrenia (Buchanan & Heinrichs, 1989).*

*Soft signs refer to subtle abnormalities in sensory-perceptual, motor, or other central nervous system functions. They are findings that are pathological at any age, but more subtle manifestations of hard signs or behaviors that are abnormal because they persist beyond a normal age.*

*The term soft sign as it relates to neurological dysfunction is usually applied to reflect atypical performance on various psychomotor or somatosensory tasks often employed in the standard neurological examination. In order for this non-normative performance to continue to be further described as a soft sign criteria of at least near normal intelligence and absence of focal neurological disorder are additionally applied. In other words, the atypical motor and sensory performance is not considered soft if mental retardation or focal brain damage can be implicated in its etiology. Clinical neurological abnormalities like rigidity, gait imbalance, and tremors, astereognosis, dysdiadochokinesia, synkinesia, tactile localization deficits, and minor reflex asymmetries are among the many examples of behaviors considered to be soft signs of neurological dysfunction.*

*Motor overflow, also called neurological overflow or synkinesia, is a term used to describe uncontrolled or unconscious movements that have no definite cause, are associated with intentional movements, and are generally not associated with a well-defined neurological condition.*

Table 27: SCHEMATIC OF NEURONAL FLOW



*An overview that displays the soft signs of pyramidal distribution of weakness*