

Table 3-2**Grading Scale for Muscle Stretch Responses**

GRADE	EVALUATION	RESPONSE CHARACTERISTICS
0	Absent	No visible or palpable contraction with reinforcement
1	Normal	Slight muscle contraction with little or no joint movement
2	Normal	Distinct muscle contraction with slight joint movement
3	Normal	Clearly visible muscle contraction with moderate joint movement
4	Abnormal	Strong muscle contraction with one to three beats of clonus. Reflex spread to the contralateral side may be noted
5	Abnormal	Strong muscle contraction with sustained clonus. Reflex spread to the contralateral side may be noted

6. Examination of muscle stretch reflexes is a routine part of the general physical examination. When testing phasic muscle stretch reflex responses, the examiner should pay particular attention to the following reflex response variables: threshold, latency, magnitude (amplitude and spread), and duration. The most common finding suggestive of abnormality is asymmetry between sides of the elicited response. (Thus, skill through practice is necessary to ensure that examiner technique is not a source of variability in the response.) Reflex responses are typically graded on a 4 or 5 point scale (Table 3-2). Lesions in the peripheral nervous system result in reduced or absent muscle stretch reflex responses, while lesions in the CNS generally (but not always) result in exaggerated reflex responses
7. Cutaneous reflexes are elicited by stimuli applied to the skin. Cutaneous afferents effect motor behavior through interneurons interposed between the afferent and efferent limbs of the reflex arc. Thus, cutaneous reflexes are thought to be multisynaptic in nature. The most important cutaneous reflex in clinical neurology is the plantar reflex. The normal response to stimulation of the plantar surface of the foot is toe flexion. An abnormal response consists of extension of the great toe with fanning of the other toes. The term *Babinski response* is used to refer to this abnormal reflex response.