

Tardieu Scale

This test is performed with patient in the supine position, with head in midline. Measurements take place at 3 velocities (V1, V2, and V3). Responses are recorded at each velocity as X/Y, with X indicating the 0 to 5 rating, and Y indicating the degree of angle at which the muscle reaction occurs. By moving the limb at different velocities, the response to stretch can be more easily gauged since the stretch reflex responds differently to velocity.

Velocities:

- V1: As slow as possible, slower than the natural drop of the limb segment under gravity
- V2: Speed of limb segment falling under gravity
- V3: As fast as possible, faster than the rate of the natural drop of the limb segment under gravity

Scoring:

- 0 No resistance throughout the course of the passive movement
- 1 Slight resistance throughout the course of passive movement, no clear catch at a precise angle
- 2 Clear catch at a precise angle, interrupting the passive movement, followed by release
- 3 Fatigable clonus with less than 10 seconds when maintaining the pressure and appearing at the precise angle
- 4 Unfatigable clonus with more than 10 seconds when maintaining the pressure and appearing at a precise angle
- 5 Joint is immovable

Example:

When testing spasticity of the hamstring at the speed V1, place the patient in the supine position. Flex the hip to 90 degrees, with the opposite hip extended (as for popliteal angle test). Beginning with the knee flexed, extend the knee as slowly as possible. If a clear catch interrupts the passive movement at -70 degrees of extension, followed by a release facilitating further extension to -50 degrees of extension, then the Tardieu V1 score would be 2/-70. The rating would be repeated for V2 and V3 velocities. Evaluating movement of a part at different velocities may help distinguish passive stiffness from spasticity.