

# Medical Research Council Scale for Muscle Strength

The patient's effort is graded on a scale of 0-5:

Grade 5: Muscle contracts normally against full resistance.

Grade 4: Muscle strength is reduced but muscle contraction can still move joint against resistance.

Grade 3: Muscle strength is further reduced such that the joint can be moved only against gravity with the examiner's resistance completely removed. As an example, the elbow can be moved from full extension to full flexion starting with the arm hanging down at the side.

Grade 2: Muscle can move only if the resistance of gravity is removed. As an example, the elbow can be fully flexed only if the arm is maintained in a horizontal plane.

Grade 1: Only a trace or flicker of movement is seen or felt in the muscle or fasciculations are observed in the muscle.

Grade 0: No movement is observed.

Clinical grading scale employed for functional assessments

Grade 0: normal.

Grade 1: no disability; minor sensory signs or areflexia.

Grade 2: mild disability; ambulatory for >200 m; mild weakness in one or more limbs and sensory impairment.

Grade 3: moderate disability; ambulatory for >50 m without stick; moderate weakness MRC Grade 4 and sensory impairment.

Grade 4: severe disability; able to walk >10 m with support of stick; motor weakness MRC Grade 4 and sensory impairment.

Grade 5: requires support to walk 5 m; marked motor and sensory signs.

Grade 6: cannot walk 5 m, able to stand unsupported and able to transfer to wheelchair, able to feed independently.

Grade 7: bedridden, severe quadriparesis; maximum strength MRC grade 3.

Grade 8: respirator and/or severe quadriparesis; maximum strength MRC grade 2.

Grade 9: respirator and quadriplegia.

Grade 10: dead.

# References

Medical Research Council. Aids to the examination of the peripheral nervous system, Memorandum no. 45, Her Majesty's Stationery Office, London, 1981.

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Muscle strength is often rated on a scale of 0/5 to 5/5 as follows:

0/5: no contraction

1/5: muscle flicker, but no movement

2/5: movement possible, but not against gravity (test the joint in its horizontal plane)

3/5: movement possible against gravity, but not against resistance by the examiner

4/5: movement possible against some resistance by the examiner (sometimes this category is subdivided further into 4-/5, 4/5, and 4+/5)

5/5: normal strength

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