Dermoskeletics to preserve mobility and function in inclusion body myositis

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A 45-year-old man developed gradual onset of finger flexors and quadriceps weakness. Anti-NT5C1A antibody was positive, and muscle biopsy was consistent with inclusion body myositis. Options to preserve his mobility were explored. The Dermoskeleton uses high-end sensors and advanced artificial intelligence to detect the user’s mobility intentions and generate synchronized assistance at the motorized knees. The device considerably improved the patient’s 6-minute walk test (720–790 m) and stair climbing capacity (69–140 steps per minute) (videos 1 and 2), as a result of both assistance (primary) and bracing (secondary) factors. Advancing biomechanical technology provides novel options to preserve mobility and function for patients with neuromuscular diseases.

Author contributions

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