

RESEARCH ARTICLE

Manual muscle testing and hand-held dynamometry in people with inflammatory myopathy: An intra- and interrater reliability and validity study

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Abbreviations: IM, inflammatory myopathy; DM, dermatomyositis; PM, polymyositis; MMT, manual muscle testing; MMT8, short version of the of the

Abstract

Manual muscle testing (MMT) and hand-held dynamometry (HHD) are commonly used in people with inflammatory myopathy (IM), but their clinimetric properties have not yet been sufficiently studied. To evaluate the reliability and validity of MMT and HHD, maximum isometric strength was measured in eight muscle groups across three measurement events. To evaluate reliability of HHD, intra-class correlation coefficients (ICC), the standard error of measurements (SEM) and smallest detectable changes (SDC) were calculated. To measure reliability of MMT linear Cohen's Kappa was computed for single muscle groups and ICC for total score. Additionally, correlations between MMT8 and HHD were evaluated with Spearman Correlation Coefficients. Fifty people with myositis (56±14 years, 76% female) were included in the study. Intra- and interrater reliability of HHD yielded excellent ICCs (0.75–0.97) for all muscle groups, except for interrater reliability of ankle extension (0.61). The corresponding SEMs% ranged from 8 to 28% and the SDCs% from 23 to 65%. MMT8 total score revealed excellent intra- and interrater reliability (ICC>0.9). Intrarater reliability of single muscle groups was substantial for shoulder and hip abduction, elbow and neck flexion, and hip extension (0.64–0.69); moderate for wrist (0.53) and knee extension (0.49) and fair for ankle extension (0.35). Interrater reliability was moderate for neck flexion (0.54) and hip abduction (0.44); fair for shoulder abduction, elbow flexion, wrist and ankle extension (0.20–0.33); and slight for knee extension (0.08). Correlations between the two tests were low for wrist, knee, ankle, and hip extension; moderate for elbow flexion, neck flexion and hip abduction; and good for shoulder abduction. In conclusion, the MMT8 total score is a reliable assessment to consider general muscle weakness in people with myositis but not for

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Guidelines for Chiropractic Quality Assurance and Practice Parameters Scott Haldeman, David

Chapman-Smith, Donald M. Petersen, 2005 The first ever practice guidelines by and for the profession These proceedings are the result of the landmark Mercy Center Consensus Conference in which chiropractic practitioners in the academic clinical political and regulatory sectors met to reach agreement on standards of practice producing guidelines for practice that

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Muscle and Sensory Testing - E-Book Nancy Berryman Reese,2020-04-21 NEW Techniques of Functional Muscle Testing chapter includes completely revised content to give you a strong foundation of testing techniques UPDATED Expanded clinical notes and case vignettes challenge you to apply your knowledge to real world situations and think creatively about clinical problems UPDATED Consistent chapter layout by joint and muscle system allows you to easily locate important information UPDATED References throughout the book enable you to quickly find the most up to date sources on specific topics UNIQUE 185 Video clips on the companion Evolve website reinforce your understanding of key techniques such as muscle tests handheld dynamometry pediatric handheld dynamometry sensory and neurologic testing proper patient and clinician positioning and force application

Fundamentals of Musculoskeletal Assessment Techniques M. Lynn Palmer,Marcia E. Epler,Marcia F. Epler,1998 Organized by region this text provides the fundamentals of evaluation and examination techniques of the musculoskeletal system Each region begins with step by step instructions for goniometry manual muscle testing muscle length joint accessory motions and special orthopedic tests Special discussions of posture and gait analysis are also included New in this edition is a chapter on Assessment of Pain The discussion on the Spine has been expanded to three chapters Cervical Thoracolumbar Spine and Sacroiliac Joint Compatibility BlackBerry OS 4 1 or Higher iPhone iPod Touch 2 0 or Higher Palm OS 3 5 or higher Palm Pre Classic Symbian S60 3rd edition Nokia Windows Mobile Pocket PC all versions Windows Mobile Smartphone Windows 98SE 2000 ME XP Vista Tablet PC

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Kinesiology for Occupational Therapy Melinda F. Rybski,2024-06-01 Kinesiology for Occupational Therapy Third Edition covers the theoretical background for understanding the kinematics and kinetics of normal human physiological movement Each specific joint is assessed in terms of musculoskeletal function movements possible and an overview of pathology that may develop Dr Melinda Rybski covers four occupational therapy theories related to functional motion that are important for occupational therapists to know This Third Edition has been updated to reflect the current field

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Physical Medicine and Rehabilitation Joel A. DeLisa, Bruce M. Gans, Nicholas E. Walsh, 2005 The gold standard physical medicine and rehabilitation text is now in its Fourth Edition with thoroughly updated content and a more clinical focus More than 150 expert contributors most of them new to this edition address the full range of issues in contemporary physical medicine and rehabilitation and present state of the art patient management strategies emphasizing evidence based recommendations This edition has two separate volumes on Physical Medicine and Rehabilitation Medicine Each volume has sections on principles of evaluation and management management methods major problems and specific disorders Treatment algorithms and boxed lists of key clinical facts have been added to many chapters

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