Shoulder Publications

**An EMG Analysis of the Shoulder in Throwing and Pitching: A Preliminary Report**

Jobe, F. W., Tibone, J. E., Perry, J., & Moynes, D. (1983). An EMG analysis of the shoulder in throwing and pitching: a preliminary report. *The American journal of sports medicine*, *11*(1), 3-5.

**Anatomy and Biomechanics of the Shoulder in Throwing, Swimming, Gymnastics, and Tennis**

Perry, J. A. C. Q. U. E. L. I. N. (1983). Anatomy and biomechanics of the shoulder in throwing, swimming, gymnastics, and tennis. *Clinics in sports medicine*, *2*(2), 247-270.

**An EMG Analysis of the shoulder in Pitching: A Second Reports**

Jobe, F. W., Moynes, D. R., Tibone, J. E., & Perry, J. (1984). An EMG analysis of the shoulder in pitching: a second report. *The American journal of sports medicine*, *12*(3), 218-220.

**A Comparative Electromyographic Analysis of the Shoulder During Pitching: Professional Versus Amateur Pitchers**

Gowan, I. D., Jobe, F. W., Tibone, J. E., Perry, J., & Moynes, D. R. (1987). A comparative electromyographic analysis of the shoulder during pitching: professional versus amateur pitchers. *The American journal of sports medicine*, *15*(6), 586-590.

**The Normal Shoulder During Freestyle Swimming: An Electromyographic and Cinematographic Analysis of Twelve Muscles**

Pink, M., Perry, J., Browne, A., Scovazzo, M. L., & Kerrigan, J. (1991). The normal shoulder during freestyle swimming: an electromyographic and cinematographic analysis of twelve muscles. *The American Journal of Sports Medicine*, *19*(6), 569-576.

**An Electromyographic Analysis of the Upper Extremity in Pitching**

DiGiovine, N. M., Jobe, F. W., Pink, M., & Perry, J. (1992). An electromyographic analysis of the upper extremity in pitching. *Journal of shoulder and elbow surgery*, *1*(1), 15-25.

**EMG Analysis of the Scapular Muscles During a Shoulder Rehabilitation Program**

Moseley JR, J. B., Jobe, F. W., Pink, M., Perry, J., & Tibone, J. (1992). EMG analysis of the scapular muscles during a shoulder rehabilitation program. *The American journal of sports medicine*, *20*(2), 128-134.

**Electromyographic Analysis of Shoulder Muscles of Men with Low-Level Paraplegia During a Weight Relief Raise**

Reyes, M. L., Gronley, J. K., Newsam, C. J., Mulroy, S. J., & Perry, J. (1995). Electromyographic analysis of shoulder muscles of men with low-level paraplegia during a weight relief raise. *Archives of Physical Medicine and Rehabilitation*, *76*(5), 433-439.

**Electromyographic Activity of Shoulder Muscles During Wheelchair Propulsion by Paraplegic Persons**

Mulroy, S. J., Gronley, J. K., Newsam, C. J., & Perry, J. (1996). Electromyographic activity of shoulder muscles during wheelchair propulsion by paraplegic persons. *Archives of physical medicine and rehabilitation*, *77*(2), 187-193.

**Electromyographic Analysis of the Shoulder Muscles During Depression Transfers in Subjects with Low-Level Paraplegia**

Perry, J., Gronley, J. K., Newsam, C. J., Reyes, M. L., & Mulroy, S. J. (1996). Electromyographic analysis of the shoulder muscles during depression transfers in subjects with low-level paraplegia. *Archives of physical medicine and rehabilitation*, *77*(4), 350-355.

**Shoulder Joint Kinetics During the Push Phase of Wheelchair Propulsion**

Kulig, K., Rao, S. S., Mulroy, S. J., Newsam, C. J., Gronley, J. K., Bontrager, E. L., & Perry, J. (1998). Shoulder joint kinetics during the push phase of wheelchair propulsion. *Clinical Orthopaedics and Related Research®*, *354*, 132-143.

**Electromyographic and Kinematic Analysis of the Shoulder During Four Activities of Daily Living in Men with Tetraplegia**

Gronley, J., Newsam, C. J., Mulroy, S. J., Rao, S. S., Perry, J., & Helm, M. (2000). Electromyographic and kinematic analysis of the shoulder during four activities of daily living in men with tetraplegia. *J Rehab Res Dev*, *37*(4), 423-432.

**The Effect of Level of Spinal Cord Injury on Shoulder Joint Kinetics During Manual Wheelchair Propulsion**

Kulig, K., Newsam, C. J., Mulroy, S. J., Rao, S., Gronley, J. K., Bontrager, E. L., & Perry, J. (2001). The effect of level of spinal cord injury on shoulder joint kinetics during manual wheelchair propulsion. *Clinical biomechanics*, *16*(9), 744-751.

**Shoulder EMG Dring Depression Raise in Men with Spinal Cord Injury: The Influence of Lesion Level**

Newsam, C. J., Lee, A. D., Mulroy, S. J., & Perry, J. (2003). Shoulder EMG during depression raise in men with spinal cord injury: the influence of lesion level. *The Journal of Spinal Cord Medicine*, *26*(1), 59-64.

**Effects of Spinal Cord Injury Level on the Activity of Shoulder Muscles During Wheelchair Propulsion: An Electromyographic Study**

Mulroy, S. J., Farrokhi, S., Newsam, C. J., & Perry, J. (2004). Effects of spinal cord injury level on the activity of shoulder muscles during wheelchair propulsion: an electromyographic study. *Archives of physical medicine and rehabilitation*, *85*(6), 925-934.

**Effect of Fore-Aft Seat Position on Shoulder Demands During Wheelchair Propulsion: Part 1. A Kinetic Analysis**

Mulroy, S. J., Newsam, C. J., Gutierrez, D., Requejo, P., Gronley, J. K., Lighthall Haubert, L., & Perry, J. (2005). Effect of fore-aft seat position on shoulder demands during wheelchair propulsion: part 1. A kinetic analysis. *The journal of spinal cord medicine*, *28*(3), 214-221.

**Effect of Fore-Aft Seat Position on Shoulder Demands During Wheelchair Propulsion: Part 2. An Electromyographic Analysis**

Gutierrez, D., Mulroy, S. J., Newsam, C. J., Gronley, J., & Perry, J. (2005). Effect of Fore-Aft Seat Position on Shoulder Demands During Wheelchair Propulsion: Part2. An Electromyographic Analysis. *The journal of spinal cord medicine*, *28*(3), 222-229.

**A Comparison of Shoulder Joint Forces During Ambulation with Crutches Versus a Walker in Persons with Incomplete Spinal Cord Injury**

Haubert, L. L., Gutierrez, D. D., Newsam, C. J., Gronley, J. K., Mulroy, S. J., & Perry, J. (2006). A comparison of shoulder joint forces during ambulation with crutches versus a walker in persons with incomplete spinal cord injury. *Archives of physical medicine and rehabilitation*, *87*(1), 63-70.

**The Relationship of Shoulder Pain Intensity to Quality of life, Physical Activity, and Community Participation in Persons with Paraplegia**

Gutierrez, D. D., Thompson, L., Kemp, B., & Mulroy, S. J. (2007). The relationship of shoulder pain intensity to quality of life, physical activity, and community participation in persons with paraplegia. *The journal of spinal cord medicine*, *30*(3), 251-255.

**Evidence-Based Strategies to Preserve Shoulder Function in Manual Wheelchair Users with Spinal Cord Injury**

Requejo, P., Mulroy, S., Haubert, L. L., Newsam, C., Gronley, J., & Perry, J. (2008). Evidence-based strategies to preserve shoulder function in manual wheelchair users with spinal cord injury. *Topics in Spinal Cord Injury Rehabilitation*, *13*(4), 86-119.

**Shoulder Muscular Demand During Lever-Activated vs Pushrim Wheelchair Propulsion in Persons with Spinal Cord Injury**

Santos Requejo, P., Lee, S., Mulroy, S., Lighthall Haubert, L., Bontrager, E., Gronley, J., & Perry, J. (2008). Shoulder muscular demand during lever-activated vs pushrim wheelchair propulsion in persons with spinal cord injury. *The journal of spinal cord medicine*, *31*(5), 568-577.

**Comparison of Shoulder Muscle Electromyographic Activity During Standard Manual Wheelchair and Push-Rim Activated Power Assisted Wheelchair Propulsion in Persons with Complete Tetraplegia**

Lighthall-Haubert, L., Requejo, P. S., Mulroy, S. J., Newsam, C. J., Bontrager, E., Gronley, J. K., & Perry, J. (2009). Comparison of shoulder muscle electromyographic activity during standard manual wheelchair and push-rim activated power assisted wheelchair propulsion in persons with complete tetraplegia. *Archives of physical medicine and rehabilitation*, *90*(11), 1904-1915.

**Impact of Gender on Shoulder Torque and Manual Wheelchair Usage for Individuals with Paraplegia: A Preliminary Report**

Hatchett, P., Requejo, P., Mulroy, S., Haubert, L., Eberly, V., & Conners, S. (2009). Impact of gender on shoulder torque and manual wheelchair usage for individuals with paraplegia: a preliminary report. *Topics in spinal cord injury rehabilitation*, *15*(2), 79-89.

**Effects of Reduction in Shoulder Pain on Quality of Life and Community Activities Among People Living Long-Term with SCI Paraplegia: A Randomized Control Trial**

Kemp, B. J., Bateham, A. L., Mulroy, S. J., Thompson, L., Adkins, R. H., & Kahan, J. S. (2011). Effects of reduction in shoulder pain on quality of life and community activities among people living long-term with SCI paraplegia: a randomized control trial. *The journal of spinal cord medicine*, *34*(3), 278-284.

**Strengthening and Optimal Movements for Painful Shoulders (STOMPS) in Chronic Spinal Cord Injury: A Randomized Controlled Trial**

Mulroy, S. J., Thompson, L., Kemp, B., Hatchett, P. P., Newsam, C. J., Lupold, D. G., ... & Gordon, J. (2011). Strengthening and optimal movements for painful shoulders (STOMPS) in chronic spinal cord injury: a randomized controlled trial. *Physical therapy*, *91*(3), 305-324.

**Utilization of DICOM Multi-Frame Objects for Integrating Kinetic and Kinematic Data with Raw Videos in Movement Analysis of Wheel-Chair Users to Minimize Shoulder Pain**

Deshpande, R. R., Li, H., Requejo, P., McNitt-Gray, S., Ruparel, P., & Liu, B. J. (2012, February). Utilization of DICOM multi-frame objects for integrating kinetic and kinematic data with raw videos in movement analysis of wheel-chair users to minimize shoulder pain. In *Medical Imaging 2012: Advanced PACS-based Imaging Informatics and Therapeutic Applications* (Vol. 8319, pp. 223-228). SPIE.

**Intensity of Shoulder Muscle Activation During Resistive Exercises Performed With and Without Virtual Reality Games**

Mazzone, B., Haubert, L. L., Mulroy, S., Requejo, P., Gotsis, M., Lympouridis, V., ... & Winstein, C. (2013, August). Intensity of shoulder muscle activation during resistive exercises performed with and without virtual reality games. In *2013 International Conference on Virtual Rehabilitation (ICVR)* (pp. 127-133). IEEE.

**Shoulder Strength and Physical Activity Predictors of Shoulder Pain in People with Paraplegia from Spinal Injury**

Mulroy, S. J., Hatchett, P., Eberly, V. J., Lighthall Haubert, L., Conners, S., & Requejo, P. S. (2015). Shoulder strength and physical activity predictors of shoulder pain in people with paraplegia from spinal injury: prospective cohort study. *Physical therapy*, *95*(7), 1027-1038.

**Relationship Between Hand Contact Angle and Shoulder Loading During Manual Wheelchair Propulsion by Individuals with Paraplegia**

Requejo, P. S., Mulroy, S. J., Ruparel, P., Hatchett, P. E., Haubert, L. L., Eberly, V. J., & Gronley, J. K. (2015). Relationship between hand contact angle and shoulder loading during manual wheelchair propulsion by individuals with paraplegia. *Topics in spinal cord injury rehabilitation*, *21*(4), 313-324.

**Effectiveness of Two Intervention Programs to Prevent Shoulder Pain After Spinal Cord Injury**

Mulroy, S., Haubert, L. L., Eberly, V., Conners, S., & Weiss, W. (2017). Effectiveness of two intervention programs to prevent shoulder pain after spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, *98*(12), e174.

**Predictors of Shoulder Pain in Manual Wheelchair Users**

Walford, S. L., Requejo, P. S., Mulroy, S. J., & Neptune, R. R. (2019). Predictors of shoulder pain in manual wheelchair users. *Clinical Biomechanics*, *65*, 1-12.

**Reaction Force Generation and Mechanical Demand Imposed on the Shoulder When Initiating Manual Wheelchair Propulsion and at Self-Selected Fast Speeds**

Papp, M., Russell, I., Requejo, P. S., Furumasu, J., & McNitt-Gray, J. L. (2019). Reaction force generation and mechanical demand imposed on the shoulder when initiating manual wheelchair propulsion and at self-selected fast speeds. *Journal of Biomechanical Engineering*, *141*(12), 124505.

**A Primary Care Provider’s Guide to Shoulder Pain After Spinal Cord Injury**

Mulroy, S. J., Hafdahl, L., & Dyson-Hudson, T. (2020). A primary care provider’s guide to shoulder pain after spinal cord injury. *Topics in Spinal Cord Injury Rehabilitation*, *26*(3), 186-196.

**Effect of Reverse Manual Wheelchair Propulsion on Shoulder Kinematics, Kinetics, and Muscular Activity in Persons with Paraplegia**

Haubert, L. L., Mulroy, S. J., Requejo, P. S., Maneekobkunwong, S., Gronley, J. K., Rankin, J. W., ... & Hong, K. (2020). Effect of reverse manual wheelchair propulsion on shoulder kinematics, kinetics and muscular activity in persons with paraplegia. *The journal of spinal cord medicine*, *43*(5), 594-606.

**Shoulder Pain Prevention Program for Manual Wheelchair Users with Paraplegia: A Randomized Clinical Trial**

Haubert, L. L., Mulroy, S. J., Eberly, V. J., Gronley, J. K., Hatchett, P. E., & Conners, S. G. (2021). Shoulder pain prevention program for manual wheelchair users with paraplegia: a randomized clinical trial. *Topics in Spinal Cord Injury Rehabilitation*, *27*(4), 40-52.

**The Relationship Between the Hand Pattern Used During Fast Wheelchair Propulsion and Shoulder Pain Management**

Walford, S. L., Rankin, J. W., Mulroy, S. J., & Neptune, R. R. (2021). The relationship between the hand pattern used during fast wheelchair propulsion and shoulder pain development. *Journal of biomechanics*, *116*, 110202.