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ABSTRACTS FROM CONFERENCE PRESENTATIONS (2003 – 2005)

Relationship between shoulder pain and quality of life, physical function and community activities in persons with spinal cord injury. Gutierrez DD, Kemp B, Mulroy SJ. Submitted to Combined Section Meeting of the American Physical Therapy Association: February 2006, San Diego, CA

INTRODUCTION

Persons with spinal cord injury (SCI) are living longer and consequently are acquiring more age-related disorders. Many of these disorders are musculoskeletal in nature resulting from overuse of the upper limb (i.e., ADLs, transfers, raises and wheelchair mobility). Severe, general body pain in those with SCI has been reported to be related to a lower quality of life. In this population, the shoulder joint has been identified as one of the leading causes of pain, however, the effect of shoulder pain on quality of life and other related measures has not been specifically studied. Therefore the purpose of this investigation is to identify the relationship between shoulder pain and quality of life, physical function and community activities in persons with paraplegia resulting from SCI.

METHODS

Forty-four participants with shoulder pain and paraplegia who push a manual wheelchair (mean age: 45.7 years; median duration of injury: 20 years; injury level T1 – L2) completed questionnaires on shoulder pain using the Wheelchair User's Shoulder Pain Index score (WUSPI), quality of life (Subjective Quality of Life Scale), physical function (SF-36), and community activities (Community Activities Checklist). Correlations between shoulder pain scores and quality of life, physical function and community activities were studied using the Spearman's rho test.

RESULTS

Shoulder pain was inversely related with subjective quality of life ($r = -0.428$; $p = 0.005$) and the physical function score of the SF-36 ($r = -0.403$; $p = 0.007$). The WUSPI Index Score related poorly with involvement in community activities ($r = -0.141$; $p = 0.360$). Further analysis including only mobility-related community activities revealed an inverse relationship with WUSPI scores ($r = -0.441$; $p = 0.003$).

CONCLUSIONS

Persons with SCI experiencing higher levels of shoulder pain reported significant reductions in their subjective quality of life and upper limb physical function scores. Higher levels of shoulder pain did not relate to a change in their involvement in general community activities. The Community Activities Checklist primarily queries items that do not require community mobility and therefore the lack of relationship with shoulder pain was expected. Community activities requiring mobility, however, were significantly

reduced in persons with higher levels of shoulder pain. Attention and care to shoulder pain in persons with SCI may improve their overall quality of life as well as the use of upper limb and mobility in the community.

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