

理学療法科学

最優秀論文賞

該当なし

2018 理学療法科学 優秀論文賞 1件

「男子高校サッカー選手における オスグッド - シュラッター病発症後の調査」

理学療法科学 33(3) : 467-472, 2018

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講評

本研究は、高校サッカー選手を対象に、オスグッド-シュラッター病に罹患した選手としなかった選手の身体的特徴を比較した研究である。全国大会優勝レベルの高等学校一校で201名を対象として研究が行われており、高い競技レベルの選手を大人数対象としている点が評価される。オスグッド-シュラッター病の症状がなくなってからも、軸足の筋力は罹患しなかった選手と比べて低いままであるという興味深い結果が示されている。さらに罹患群の中でも学年別比較も行い、より詳細な分析を行っている。参加選手が多いため、難しい点ではあるが、大腿四頭筋に関する項目以外の評価が含まれるとより素晴らしい研究になるのではないかと感じる。そのため、今後の研究の発展に関して期待も込めて優秀論文とさせて頂いた。

Journal of Physical Therapy Science

2018 JPTS Best Paper Award

該当なし

2018 JPTS Excellent Paper Award 3件

- Relationship between advanced glycation end-product accumulation in the skin and pulmonary function
J Phys Ther Sci. 30(3):413-418, 2018

Kubo A, Kato M, Sugioka Y, Mitsui R, Fukuhara N, Nihei F, Takeda Y.

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Comments

According to recent studies, the level of advanced glycation end products (AGEs) increases with age and is higher in smokers and COPD patients. AGEs increase inflammation by binding to receptors for AGE (RAGE), which are present on cell surfaces in tissues. Therefore, AGE accumulation may play a role in the pathogenesis of COPD by increasing inflammation. Recently, AGEs assessed by skin autofluorescence (SAF) could help in the rapid evaluation of AGE accumulation in clinical settings. The aim of this study was to verify the relationship between SAF and pulmonary function in younger and elderly people with normal spirometry results. This study revealed that FEV/FVC was greatly influenced by SAF than aging factor. SAF could measure without any efforts for subjects so that SAF might be one of the useful methods to assess pulmonary function in case of mental disorder, unconsciousness patient or dementia. It is unique idea to apply SAF to assess pulmonary function without effort. Besides, this study was well-designed that inclusion and exclusion criteria were strict in order not to be affected by disease factor such as diabetes mellitus or hypertension. Although pulmonary function was affected by other confounders such as air pollution or genetic disposition, this study could be expected to develop relevance of SAF by next longitudinal study. Hence, we recommend this study as an excellent article.

- The effect of a short term conservative physiotherapy versus occlusive splinting on pain and range of motion in cases of myogenic temporomandibular joint dysfunction: a randomized controlled trial

J Phys Ther Sci. 30(9); 1156-1160, 2018

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Comments

This well-designed randomized controlled trial revealed that conservative physiotherapy could improve pain and range of motion compared to occlusive splints for patients with temporomandibular joint dysfunction. Required sample size was adequately calculated by a power analysis. Based on the calculation,

sufficient number of patients participated in this study and clinically meaningful results were obtained. Also details of conservative physiotherapy programs were described so that readers can apply the program for the patients. However, outcome measures were only intensity of pain and temporomandibular joint opening index. If there is further study, more comprehensive assessment, such as questionnaire for temporomandibular joint disorders, should be employed to sophisticate the study. Overall, clinically meaningful results were shown in this well-designed RCT.

- Structural validity of balance evaluation systems test assessed using factor and Rasch analysis in patients with stroke

J Phys Ther Sci. 29(12), 1446-1454, 2018

Kazuhiro Miyata, PT, MS1, 2)*, Satoshi Hasegawa, PT, MS2, 3), Hiroki Iwamoto, PT, MS4), Tomohiro Otani, PT, MS5), Yoichi Kaizu, PT, MS5), Tomoyuki Shinohara, PT, PhD6), Shigeru Usuda, PT, PhD2)

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4) Hidaka Rehabilitation Hospital, Japan

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6) Takasaki University of Health and Welfare, Japan

Comments

This study examined validity of comprehensive assessment tool for balance ability called as balance evaluation systems test. (BESTest) It is worthy that this study involved a large number of stroke patients, and analyzed detail of each parameter using Rasch analysis. This study showed that four-factor model comprising 25 items were valid and reliable for the BESTest. Even though it is difficult to assess balance and locomotive ability comprehensively, we consider that this article provides precious knowledge for clinical application in the future.

2018 JPTS Encouragement Paper Award 3件

- Age-dependent changes in dynamic standing-balance ability evaluated quantitatively using a stabilometer

J Phys Ther Sci. 29(1), 86-91, 2018

Yasuhiro Suzuki, RPT, MS*, Shigeru Yatoh, MD, PhD, Hiroaki Suzuki, MD, PhD, Yuuki Tanabe, RPT, Yukiyo Shimizu, MD, PhD, Yasushi Hada, MD, PhD, Hitoshi Shimano, MD, PhD

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Comments

In this study, 583 healthy subjects were measured IPS(index of postural stability) under two conditions (open eyes/hard surface OE/HS ; closed eyes/soft surface CE/SS) . IPS (OE/HS) began to decrease at middle-age (40–60 years old), and then decreased more rapidly during elderly ages (>60 years old). IPS (CE/SS) decreased linearly with increasing age. It was concluded that IPS (OE/HS) indicates comprehensive balance ability, while IPS (CE/SS) reveals balance ability. In this way, it is a very interesting study from the viewpoint of novelty and development. It is a paper that can be a criterion for evaluating the balance.

- Immediate effects of exercise intervention on cancer-related fatigue

J Phys Ther Sci.29(2), 262-265, 2018

Ryutaro Matsugaki, RPT, MOH1, 2)*, Toru Akebi, RPT, PhD1), Hideo Shitama, RPT1), Futoshi Wada, MD, PhD3), Satoru Saeki, MD, PhD4)

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講評

本研究はがん患者におけるがん関連疲労に対する運動療法の即時効果を検証した研究である。がん患者18例に対して、立ち上がり運動と歩行練習をBorgのcategory-ratio scale (CR-10)により強度を設定して運動療法を行い、Canser Fatigue Scaleでがん関連疲労の評価を行った。その結果、CR-10で4 (やや強い) をターゲットとした運動療法ががん関連疲労を即時的減少させることが示されている。これまでの研究で運動療法ががん関連疲労を減少させることは多く報告されてきたが、本研究では、即時効果がみられた、運動強度をがん患者の訴えの強い自覚的疲労感で設定した、先行研究よりもやや強度の低い運動が疲労感の強いまたは年齢の高い患者に有効であった、ことが示されたことから、疲労患者が運動を継続的に実施できる方略が提供できたことに理学療法的意義があると評価する。以上の結果から、本論文を奨励論文賞に推薦する。

- Quantitative evaluation of handwriting: factors that affect pen operating skills

J Phys Ther Sci. 29(8), 971-975, 2018

Sho Horie, OTR, MS1, 2)*, Katsuyuki Shibata, OTR, PhD3)

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3) Faculty of Health Sciences, Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, Japan

Comments

This study compared pen operating skills using pressure plate between different conditions writing pressure and writing speed. It seems to be valuable that the authors quantitatively assessed skill activity such as handwriting. The study showed interesting results that a factor relating to pen operating skill was only pen pressure. The results seem to provide useful knowledge for rehabilitation to enhance finger function when a therapist instructs handwriting. We expect to compare the pen operating skills between healthy subjects and Parkinson's disease patients with micrography in the future. Therefore, we consider this article should be included as one of the encouragement paper awards.