тугоподвижность, локальная атрофия мышц).

Обсуждение: Полученные результаты показывают убедительные преимущества артроскопического способа хирургического лечения LHBT. Сокращение времени операции и госпитализации повышает эффективность лечения и снижает экономические затраты. Быстрое снижение болевого синдрома и более высокие показатели функционального восстановления (на 8–10 баллов выше по шкале Constant–Murley через 6 месяцев) позволяют пациентам быстрее возвращаться к профессиональной и спортивной деятельности. Кроме того, артроскопическая техника позволяет одномоментно устранить сопутствующую патологию плечевого сустава, что невозможно при традиционном открытом вмешательстве. Это особенно важно у пациентов молодого возраста и спортсменов.

Вывод. Артроскопический тенодез длинной головки двуглавой мышцы плеча является эффективным и безопасным методом хирургического лечения, который обеспечивает: сокращение длительности операции на ~18%; уменьшение сроков госпитализации более чем в 2 раза; более быстрое восстановление функции (на 2–3 недели раньше по сравнению с открытым методом); снижение частоты осложнений почти в 3 раза. Таким образом, артроскопический метод может рассматриваться как **золотой стандарт хирургического** лечения разрывов LHBT в современной травматологии и ортопедии.

POSSIBILITIES OF OPTICAL MEASUREMENTS IN EVALUATION OF THE FUNCTION OF THE MUSCULOSKELETAL SYSTEM

Usmonalieva N.Sh., Tsoy S.A.
Republican Scientific and Practical Center for Sports Medicine.

Relevance. Devices designed for optical measurements are a powerful tool for a deeper understanding and objective assessment of musculoskeletal disorders, as well as for monitoring and assessing the effectiveness of rehabilitation programs. This circumstance also contributes to the development of personalized medicine and improved results in various fields of medicine.

The aim of the study. To study and evaluate the capabilities of the DIERS method, as well as to evaluate the effectiveness of rehabilitation for functional disorders of the musculoskeletal system.

Materials and methods. The study involved 50 patients with functional posture disorders. The average age of the patients was 22.39±0.58. The spine was assessed at rest and during movement in a three-dimensional image. The patients were examined before the rehabilitation program and were also observed dynamically. Also, the reproducibility of the spine motion analysis scan during walking using DIERS 4D Motion was assessed and had standard deviations from 0.51 to 2.3 degrees, and the standard error was the average values from 0.14 to 0.51 degrees.

Results. For each patient, hardware diagnostics were performed using the DIERS 4D Motion device. Direct diagnostics and analysis of the results and the maximum time spent on this procedure is 45-60 minutes. The patient does not receive any radiation. During static studies, markers were determined automatically. Diagnostics were performed in the frontal and sagittal planes. Drerup and Hierholzer using DIERS formetric (for idiopathic scoliosis between 20° and 50° according to Cobb) showed an error of 4 mm for lateral deviation and 3° for rotation. The accuracy of measuring the lateral deviation of the vertebrae was 6.2 mm (in some 4 mm) and the accuracy of measuring the rotation of the vertebrae was 4.6°

Conclusions. Thus, optical measurements are used to monitor recovery after injuries, surgeries or neurological diseases, as well as to assess the effectiveness of rehabilitation measures, including individual recovery programs. There is a great need for their use in diagnosing musculoskeletal diseases and quickly identifying posture disorders. It should be noted that optical data allows for quantitative and objective assessment, minimizing the subjectivity inherent in manual assessment by specialists. Based on the above, there is a need to introduce such technologies into clinical practice and continue research in this area.