

Vpliv uporabe elastičnih lepilnih trakov na bolečino in obseg gibljivosti ramenskega sklepa pri pacientih po možganski kapi: pilotska študija

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Uvod: Bolečina v rami okvarjenega zgornjega uda je pogosta in razmeroma zgodnja komplikacija pri pacientih po možganski kapi (1). Elastični lepilni trakovi (ELT) se vedno pogosteje uporabljajo pri športnikih in tudi ljudeh z različnimi bolezenskimi stanji. Učinkovitost omenjenega terapevtskega postopka še ni povsem dokazana (2), posebno vprašljiva je uporaba ELT pri nevroloških bolnikih. Namen te pilotske študije je bil ugotoviti, ali uporaba ELT vpliva na zmanjšanje bolečine in povečanje obsega gibljivosti ramenskega sklepa pri pacientih po možganski kapi. **Metode:** Sodelovalo je 12 pacientov s popolno ali delno ohromelim zgornjim udom po možganski kapi, razdeljenih v poskusno (povprečna starost 48 let; 4 moški in 2 ženske) in kontrolno skupino (povprečna starost 66 let; 3 moški in 3 ženske). Stran ohromelosti je bila pri obeh skupinah enako porazdeljena (4 levo, 2 desno). Poskusni skupini smo trikrat v dveh tednih namestili ELT ter pred nameščanjem in po njem vsakokrat z goniometrom izmerili pasivno gibljivost ramenskega sklepa in z vizualno analogno lestvico (VAS) ocenili bolečino. Pri kontrolni skupini smo izvedli enake meritve v istih časovnih intervalih. Dodatno smo pri vseh pacientih s prirejenim testom po Rossu (3) pred prvo meritvijo ocenili motorične funkcije zgornjega uda in senzibiliteto. Pri statistični analizi smo za primerjavo skupin uporabili Mann-Whitneyjev test, za ugotavljanje sprememb med posameznimi meritvami pa Wilcoxonov test (programski paket SPSS, verzija 20.0). **Rezultati:** Pri poskusni skupini se je pasivna gibljivost pri gibu elevacije skozi antefleksijo in pri elevaciji skozi abdukcijo statistično pomembno izboljšala ($p < 0,05$) po drugi in tretji namestitvi ELT. Statistično pomembno zmanjšanje bolečine smo ugotovili pri gibu elevacije skozi abdukcijo, prav tako po drugi in tretji namestitvi ELT. V nobeni izmed preučevanih spremenljivk se poskusna skupina ni pomembno razlikovala od kontrolne skupine ($p > 0,05$). **Zaključki:** Po izsledkih te pilotske študije in dosedanjih izkušnjah se zdi, da lahko terapevtski postopek z ELT pri pacientih po možganski kapi z bolečo ramo prispeva k izboljšanju pasivne gibljivosti in zmanjšanju bolečine. Vsekakor bo ocena učinkovitosti metode, kdaj in v katerih primerih je primerna pri zdravljenju boleče rame po možganski kapi, mogoča šele po izsledkih boljše načrtovane kontrolirane študije na večjem številu preiskovancev skozi daljše časovno obdobje.

Ključne besede: elastični lepilni trakovi, možganska kap, rama, bolečina, gibljivost.

The effect of elastic adhesive tapes on pain and mobility in the shoulder joint in patients after stroke: a pilot study

Background: A painful shoulder of the impaired upper limb is a frequent and relatively early complication in stroke patients (1). Elastic adhesive tapes (EAT) have been increasingly used in athletes and persons with different health conditions. The efficiency of the mentioned therapy has not been proven yet (2); the use of EAT is especially questionable in neurological patients, including patients after stroke. The aim of the pilot study was to evaluate whether the use of EAT decreased the pain and increased the mobility of the shoulder in patients after stroke. **Methods:** The study included 12 patients after stroke with complete or partial paralysis of an upper limb, who were divided into a test group and a control group. The subjects in the test group were applied elastic adhesive tapes three times in two weeks. Before and after the application, passive mobility of the shoulder joint was measured with goniometer and pain was evaluated with the visual analogue scale (VAS). The same measurements were performed in the control group at the same time intervals. Motor functions and sensitivity of the upper limb in all patients were assessed with an adjusted Ross test (3) before the first measurement. In the statistical analysis, the groups were compared with Mann Whitney test and the differences among individual measurements were defined with Wilcoxon test (SPSS version 20.0). **Results:** The average age of the subjects was 48 years in the test and 66 in the control group. There were 4 men and 2 women in the test and 3 men and 3 women in the control group. The side of paralysis was evenly distributed in both groups. In the test group, passive mobility improved with statistical significance ($p < 0.05$) in elevation with anteflexion and elevation with abduction after the second and third application of EAT. The pain decreased with statistical significance in elevation with abduction after the second and third application of EAT. In none of the analysed variables, the subjects in the test group differed significantly from the control group subjects ($p > 0.05$). **Conclusions:** Based on the pilot study and our experience, it seems that the therapy with EAT in patients with painful shoulder after stroke can improve passive mobility and decrease pain. The evaluation of the efficiency of the method, its suitability for specific cases of treatment of painful shoulder after stroke will have to base on a well-planned, controlled study with a larger number of subjects and of a longer duration.

Keywords: elastic adhesive tapes, stroke, shoulder, pain, mobility.

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