

比較職能治療師與手部復健器具的被動關節運動對於張力的影響差異  
**Compare the PROM effect for spasticity between the occupational therapists and the hand rehabilitation device**

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**Introduction:** Spasticity is usually defined as a motor disorder characterized by a velocity-dependent increase in tonic stretch reflexes with exaggerated tendon jerk. It usually causes muscle contractures and painful syndromes over time. Prevention and treatment of spasticity are the main goals of rehabilitation of patients with an upper motor neuron lesion. Repetitive passive range of motion (PROM) can decrease and prevent the spasticity. Much stroke patients need regular PROM for spastic limbs. Due to the great demand for PROM exercise, we want to compare the effect for spasticity between the occupational therapists and the hand rehabilitation device.

**Materials and Methods:** The fifteen stroke patients with upper limb spasticity were assigned to receive two different PROM programs. They received the same number and same frequency of the PROM exercise which provided by the occupational therapists and the hand rehabilitation device respectively. Tardieu Scale was used to present the degree of the upper extremity spasticity. The Myoton was used to test the muscle tone of the upper extremity.

**Results:** No significant differences ( $p > 0.05$ ) were observed between the occupational therapists and the hand rehabilitation device under the same number and frequency of PROM exercise. By using Myoton, no differences were observed for the groups of the occupational therapists and the hand rehabilitation device under the same number and frequency of PROM exercise ( $p > 0.05$ )

**Conclusion:** We provided the evidence of the same PROM effect for spasticity between the occupational therapists and the hand rehabilitation device. The study also proved the effect of PROM exercise for decreasing spasticity.

**Fibrosis dysplasia with recurrent fracture; management and prevention : a case report**

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**Introduction:** Fibrous dysplasia of the bones is an uncommon congenital skeletal disorder that is found equally in both genders and is not inherited. Fibrous dysplasia is categorized as either monostotic or polyostotic, and may occur as a component of McCune-Albright syndrome or the rare Mazabraud syndrome. Long bones, skull bones, and ribs are the most commonly affected bones. The radiological picture is somewhat variable, including a ground-glass appearance, expansion of the bone, and sclerosis surrounding the lesion. Histologically, fibrous dysplasia shows irregularly-shaped trabeculae of immature, woven bone in a background of variably cellular, loosely arranged fibrous stroma. It may be complicated by pathologic fracture, and rarely by malignant transformation. It is hard to management of the pathological fracture of fibrous dysplasia and this case will give us tendency for treatment of fibrous dysplasia.

**case report:** This 42 year-old man a case of fibrous dysplasia of femur with observation. Fracture of left femur subtrochanteric fracture due to a fall was noted first. Then he operation of open reduction and internal fixation with compression hip screw and bone graft (PRO-DENSE) over the fracture site were done. Then he was discharged, and then Refracture was noted at follow up one month later. Loosening of the implant and Refracture below to implant was noted. Operation of open reduction and internal fixation with cemented head compression hip screw and prevention with long bending locking compression plate, fracture site bone graft (PRO-DENSER). Cemented compression hip screw was applied due to severe fibrosis dysplasia (extension to the femur head). Now with 2 months follow up, no further fracture and implant failure was noted.

**Discussion:** Severe fibrous dysplasia with recurrent fracture was hard to management. Great outcome showed in use with iliac crest bone graft or TCP bone graft. Impaction allograft is the key of prompting allograft incorporating fully and preventing pathological fracture. An effective internal fixation must be used when the quality of the bone is poor. In this case we provide rigid fixation and TCP bone graft for fracture site. Further observation was still need.