E-Poster

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Postoperative Rehabilitation Program and Home Rehabilitation For A Patient With Simultaneous Bilateral Quadriceps Tendon Rupture

Topic: Miscellaneous

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BACKGROUND

Quadriceps tendon rupture is rare and the incidence is of 1.37/100,000 per year which more frequently affects middle-aged men (older than 50 years of age). Moreover, bilateral tendon rupture is even more uncommon and leads to greater disability. Frequently, the injury is related to systemic conditions, risk factors such as obesity, and quinolone, statins, or chronic steroid usage. The diagnosis is based mainly on the clinical examination and magnetic resonance imagining (MRI) is preferred as diagnostic tool. Dynamic musculoskeletal ultrasound is a non-invasive, real-time alternative to complement the clinical evaluation and helps adapt the postoperative rehabilitation program according to muscle and tendon changes at various time points. Additionally, home rehabilitation after discharge maintains patient`s physical level and ensures quicker regain of independence and engaging in daily life activities (ADLs), return to work and good quality of life (QoL).

CASE DESCRIPTION

We present a case of simultaneous, bilateral rupture of the quadriceps tendon, in a male patient suffering from long-term gout, who was part of a tailored postoperative rehabilitation program in addition to dynamic musculoskeletal ultrasound, and home rehabilitation after discharge. The main goal of this case presentation is to provide insight into tailored rehabilitation approach while considering dynamic tracking of muscular and tendon changes, and ensure the best results after discharge through an individualized home rehabilitation.

DISCUSSION

In the case of our patient, anamnesis and clinical examination raised high suspicion for simultaneous, bilateral quadriceps tendon tear and it was confirmed through MRI. The reparatory surgery was performed in the first six days after injury. In the post-surgical rehabilitation program, we used dynamic musculoskeletal ultrasound aiming to provide real-time, individualized rehabilitation interventions adapted to the needs of our patient, a new strategy regarding the management of quadriceps tendon ruptures. The patient was included in a well-structured rehabilitation program five days per week, twice a day, for nine weeks, as evidence showed that the number of physical therapy sessions was correlated to enhancement of functional outcomes. To maintain the beneficial effects, we included the patient in a home rehabilitation program and he returned to work after 11 weeks post-injury .

CONCLUSION

Bilateral, simultaneous quadriceps tendon rupture is very rare with implications for the physical and psychological aspect. Dynamic sonography complements clinical assessment and ensures real-time tailored rehabilitation, while home rehabilitation continues the beneficial effects gained previously. Early interventions are keys to quicker recovery rates, return to ADLs, and satisfying QoL.

Statement of Disclosures

None

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