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CASE REPORT - The Importance of Whole Upper Limb Strengthening in Lateral Epicondylopathy

Mr. Jonathan Flynn. Senior Lecturer University of Huddersfield, Queensgate. Huddersfield. HD1 3DH.

Mrs. A.E.Clough MCSP MSc Dip AAPP(sport) PGCE FHEA, FSOMM. Clinical Lead Physiotherapist MSK. Hull and East Yorkshire NHS Trust.

BACKGROUND

This case report discusses the treatment of a 37 year old female recreational tennis player who presented with a lateral epicondylopathy categorised in the tendon disrepair stage of the continuum model ⁽¹⁾.

INITIAL TREATMENT

This involved restoring lost terminal ROM into extension using DTFM ⁽²⁾ and Mill's manipulation followed by eccentric loading ⁽³⁾ & ⁽⁴⁾ through range. A novel device consisting of a 6m-resistance band threaded through a tennis ball to progressively load and challenge the patient was used for sports specific rehabilitation.

INITIAL RESPONSE

The patient responded well initially to the treatment approach but returned to the clinic with a recurrence of symptoms following return to full sporting activities.

FURTHER INVESTIGATIONS

Upon return to the clinic, strength testing through ROM revealed a comparative difference between the affected and non-affected side. The differences were small but a secondary hypothesis was generated suggesting a background weakness of whole upper limb strengthening potentially perpetuating the symptoms.

FURTHER INTERVENTION

A programme of full upper limb strengthening was instigated over a period of 12 weeks. This included shoulder, biceps, triceps and forearm strengthening.

CONCLUSION

The authors recognise this is a singular case study and therefore many limitations exist. However the presence of a poor overall upper limb strength may perpetuate symptoms in lateral epicondylopathy. More robust clinical trials are required to examine this suggestion.

REFERENCES

1. Cook J, Purdam, C. Is tendon pathology a continuum? A pathology model to explain the clinical presentation of load-induced tendinopathy. *Br J Sports Med.* 2009;43: 409-416.
2. Brosseau L, Casimiro L, Milne S, Welch V, Shea B, Tugwell P, Welis GA. Deep transverse friction massage for treating tendinitis. *Cochrane Database Sys Rev.* 2002 (cited 2013 April 20) Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003528/pdf/standardCopyright> © 2009 The Cochrane Collaboration. Published by John Wiley & Sons.
3. Lorenz D, Reiman M. The role and implementation of eccentric training in athlete rehabilitation: tendinopathy, hamstring strains, and ACL reconstruction. *Int J Sports Phys Ther.* 2011; 6(1): 27-44.
4. Andres BM, Murrell GAC. Treatment of Tendinopathy: What Works, What Does Not, and What is on the Horizon. *Clin Orthop Relat Res.* 2008 July; 466(7): 1539-1554.

