Comment on: The mechanism for efficacy of eccentric loading in Achilles tendon injury; an in vivo study in humans: reply

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Sir, We would like to thank Dr Knobloch [1] for his kind comments regarding our paper concerning the importance of studying the underlying mechanism of efficacy of eccentric exercises [2].

Regarding the title of our paper we stand by the title used. We have directly compared the physiology of eccentric and concentric exercises as used in common protocols for the management of Achilles injury and we do not believe the title to be misleading. Indeed we believe it medically prudent to start with healthy subjects in a study such as this. We do of course agree that it would be desirable to extend the study to injured tendons, and we allude to this in the discussion where we pass comment on how the results may alter in tendinopathy of the Achilles tendon (Discussion, paragraph 4 [2]).

Knobloch makes reference to several papers which he believes address the issue of the therapeutic mechanism of eccentric loading. Whilst many of these papers do shed light on changes observed in Achilles tendons over time (such as the excellent paper published by Langberg and co-workers on the rates of collagen synthesis) [3], we believe his comment misses the central point of our paper. Our paper directly compares eccentric and concentric loading of the Achilles tendon. Only in one of the papers quoted by Knobloch is eccentric loading actually compared with concentric loading (the paper by Shalabi *et al.* [4]). This paper compared MRI-determined volume of the Achilles tendon in both concentric and eccentric programmes; it found an increase in tendon size with both exercise regimes but no significant difference in tendon volume between the two exercise regimes and does not explain why eccentric exercises are superior. Furthermore one of the papers quoted by Knobloch does not even involve an exercise protocol [5]. We believe our paper remains the only paper to both directly compare eccentric and concentric loading and find a possible explanation for the efficacy of eccentric loading exercises.

The question of gender and tendinopathy is extremely interesting. Certainly there is evidence from the work of Cook and colleagues [6] that HRT may be protective against tendinopathy and it is interesting to compare this to rates of anterior cruciate ligament injury which are increased in women. In our study, we found no difference physiologically in the tendon loading patterns of our male and female subjects but we agree the roles of gender and tendinopathy are worthy of further research.

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Comment on: Hypovitaminosis D among rheumatology outpatients in clinical practice

Sir, Mouyis *et al.* [1] highlighted the high prevalence of unrecognized hypovitaminosis D amongst rheumatology patients. The new, long-acting bisphosphonates, such as zolendronic acid, are being increasingly used in patients with osteoporosis or Paget's disease to improve acceptability and compliance. Patients with pre-existing vitamin D deficiency who receive intravenous bisphosphonates may develop severe hypocalcaemia. This has been described in patients with underlying malignancy and hypercalcaemic bone pain treated with intravenous