

An investigation into hypermobility

Andy Smith reports on a medical trial looking at movement patterns



120 people will participate in the trials, currently running at Charing Cross Hospital in Hammersmith.

First came across the word ‘hypermobility’ five years ago while undergoing physiotherapy treatment for a back injury. I was seeing a new physio and she informed me about how the increased range of motion in my joints is highly likely to be a factor in the many sports injuries I’ve suffered over the years.

It was all very interesting, but these were the days before I had come across the Alexander Technique so I accepted her comments without thinking too much about it. It was only during my AT teacher training over the last three years that my interest in, and understanding of, hypermobility grew – partly due to an increasing fascination with how the body works and partly due to being able to pick the brains of North London AT teacher Julie Barber, who has a particular interest in the field and recently presented a workshop to the Congress in Ireland.

So when I came across a medical trial run by Imperial College London that was looking for hypermobile people to take part, my interest was piqued.

The trial has been set up to investigate *tibial* movement in people with Joint Hypermobility Syndrome (JHS) and find out whether they move differently from those who do not have it. The researchers are attempting to understand more about how leg muscles work and how knee movement differs among four groups of people:

1. people who are overly flexible who have knee pain;

2. people who are overly flexible but have no knee pain;

3. people with usual flexibility and no knee pain;

4. people with usual flexibility and knee pain.

When the trial is over, the information will be used to help with physiotherapy treatment for people with Joint Hypermobility Syndrome.

Funded by the Imperial College Healthcare Charity, the study is currently taking place at Charing Cross Hospital in Hammersmith and will ultimately have 120 people participating – 30 in each of the four groups.

What takes place?

To help gather information on my movement, two types of sensor were attached to my legs – a series of reflective markers to map my joints on a computer as I walked, plus some electrodes to monitor muscle movements. I was then asked to take part in four different tests:

- walking for six metres, several times over;
- climbing and descending a set of three steps, 15 times;
- standing on a balance platform that jerked forward suddenly, several times over;
- standing quietly for 15 minutes on highly sensitive foot plates.

I also undertook the two standard tests to determine whether or not I am hypermobile – the Beighton Score, to determine which major joints have unusually high range of movement (I scored 7 out of 9, when a score of 4 or more points towards

hypermobility) and the Brighton Criteria. This takes into account the Beighton Score as well as answers to a series of other questions, such as ‘Do you consider yourself to be double-jointed?’ and ‘Have you had *arthralgia* (joint pain) for longer than three months in four or more joints?’.

Interestingly, according to the tests I came up as having overly flexible joints but not suffering from Joint Hypermobility Syndrome. This is mainly because I have not been suffering from chronic pain continuously for the last three months. Go back four or five years, however – when I was in a lot of pain but before AT – and I would certainly have ticked that box and been classified as having JHS.

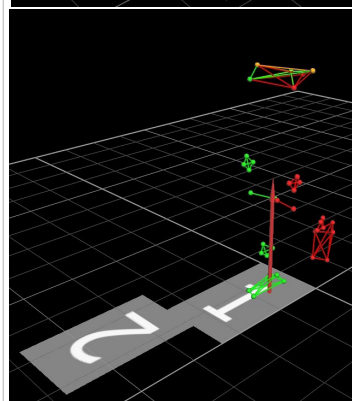
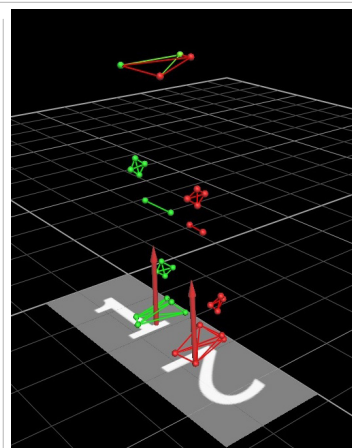
To my mind this shows a number of things:

1. That hypermobility syndrome is not always straightforward to diagnose. It is linked with a whole spectrum of disorders that can affect some people but not others, and symptoms are always not uniform amongst those who have it. Perhaps when more is understood about the condition, a more comprehensive diagnostic tool can be developed.

2. That just because we may be diagnosed with the condition, doesn’t mean that the associated symptoms will always remain the same. With early diagnosis, people can receive the information and means to help manage the condition in an appropriate way to rehabilitate themselves and live a fuller life.

3. That the Alexander Technique is a great tool to help hypermobile people cope with the challenges that the condition throws up.

If I had participated in this study before I had trained as an AT teacher, I’m certain my performances in the tests would have been very different. The standing-for-



Participants joint movements were mapped on a computer for activities like (top) standing and (bottom) walking

15-minutes test in particular was an eye-opener. After the time was up, the researcher monitoring my performance, Alex Bates, commented on how I had been the only person of the 30 he had so far studied to have pretty much even weight distributed on each foot virtually throughout the whole 15 minutes.

Prior to the Alexander Technique, I would without question have been in the same position as most people, with my weight heavily skewed to one side or other, and struggling to cope with the discomfort of standing still for so long. But the toolbag of skills I have learned over the last few years served me very well and reinforced how valuable this work can be to those with hypermobility.

The hypermobility trial is due to finish in November 2016 and the results are due to be published in early 2017.

If you wish to take part, please contact co-investigator Alex Bates on a.bates13@imperial.ac.uk. ♦