**Bursary Report for the British Association of Hand Therapists**

**[Leanne Miller]**

**[Shockwave in the management of tendinopathies and myalgia]**

**[12/09/2018]**

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| **Introduction:**  (100 words max; include details of who you are, why you applied for this bursary and your experience of the event)  As my current clinical research post involves spending the majority of my time in an academic setting I think it is essential that I continue to refresh, develop and advance my clinical repertoire in order to offer the best care to my patients. I applied for this course as shockwave is an electrotherapy modality that I do not currently use but which I was aware of and had read about in the literature. After experiencing a number of patients with chronic tendinopathies which were not responding to conventional treatment I was interested to look at this as an adjunct to my current skill set for these patients. |
| **Topic:**  (500 words +/- 10%; this will be uploaded onto the BAHT website and may be included in an e-bulletin. The topic of this report will be agreed in negation with the Director of Bursaries. The report should not contain any comments that are potentially damaging or libellous.)  Performance Health and DJO Global offered an extremely well organised and professional course. The course trainer, Cliff Eaton, was an impressive internationally renowned sports physiotherapist with many years’ experience with high-level athletes.  The course was split into the theory of how shockwave is proposed to work followed by a more practical session where we were able to try shockwave ourselves before administering it to a volunteer. I found this format worked really well for me. There were opportunities to ask questions throughout and the mix of physiotherapists, chiropractors, massage therapists and podiatrists on the course offered a wealth of clinical applications and case studies which the whole group were able to learn from.  The theory section of the course was detailed but the use of graphics, analogies and literature the mechanism by which shockwave is proposed to work became clear and understandable. Its use to reboot a stalled healing cascade seems logical, the therapy world uses other inflammatory optimises such as ultrasound. From this I was able to rationalise the type of patients I would and wouldn’t consider using shockwave on, the different types of shockwave became clear and the justification for incorporating shockwave into a treatment plan emerged. Having the opportunity to try shockwave on ourselves gave me a valuable insight into how I would introduce this to a potential patient, how I need to choose my patients carefully and grade up the intensity of the machine (bar pressure) to provide a more comfortable treatment. Practical techniques were shown such as how to hold the transmitter, the amount of pressure to exert with the transmitter, the dose required for different applications and instructions to the patient. Even just being able to hear the noise from the machine was a learning point for me and the subtle differences that could be felt from transmitter when going over a myofascial trigger point (MTP). This was one of the major learning points for me during this course as I had often underestimated the impact of MTP, and indeed their presence is debated in the literature.  In terms of its application with hand pathology, shockwave is recommended in the NICE guidelines for lateral epicondylitis, however beyond this there is insufficient evidence to recommend it for other tendinopathies. As Tim Watson acknowledges the weight of the evidence is more supportive than not. I can rationalise its potential application in an appropriate patient with a chronic Dequervains and I can understand its potential benefit in a suitable patients with CTS or trigger finger. However, other applications (such as dupuytrens) I find harder to justify given the pathophysiology is inherently different from a tendinopathy or myalgia. A quick search of the internet reveals that some clinics in the UK are offering shockwave for the dupuytrens however, this is where sound clinical reasoning and understanding of contraindications is essential.  In summary, this was a very though-provoking, interesting course. It has made me think outside the box, consider treatments there were previously not on my radar and given me the confidence to clinically reason the application of shockwave in suitable patients. I look forward to researching more about shockwave, developing clinical guidelines and using this technique in the future.  I would like to take this opportunity to thank the BAHT committee for supporting my attendance on this course.  **WORD COUNT 550.** |