Take a load off

Annie Strauch, APA Sports and Musculoskeletal Physiotherapist, is one of a small handful of physiotherapists in Australia practising a type of manual therapy treatment for those with vocal disorders. Here, *InMotion* speaks with Annie about her practice, Performance Medicine, and what prompted her to engage in the unique field of vocal unloading.

Performance Medicine has been labelled as the Australian pioneer of vocal unloading; how did you initially come to be involved in the field?

I first came into contact with vocal unloading while working as a sports and dance physiotherapist at a practice in London, where we regularly treated West End performers. Performers would present with a husky voice or their singing voice was breathy with a decreased vocal range. With physiotherapy treatment they found their range improved and their voice was clear and more efficient. That's how I really became interested in the field, because I saw an immediate response from treatment. It really opened my eyes to what something like vocal unloading could do for anyone who uses their voice professionally.

What approach to treatment does your practice take?

Overall, I take a holistic approach as the larynx has multiple relationships within the body including to the temporomandibular joint (TMJ), upper cervical spine, scapular biomechanics, thoracic cage, and respiratory biomechanics/breathing technique. Initially, Performance Medicine therapists take a local approach assessing, with voice, the perilaryngeal structures, laryngeal mobility, and the interaction with their posture and breathing. We consider how these relationships directly, and indirectly, impact the efficiency of voice production and then treat accordingly. We find we have the best results when we initially unload the larynx locally, using manual therapy as a neuromuscular cycle breaker to interrupt any maladaptive voice patterns that may have developed. We then manage postural and distal factors in the context of functional voicing and this treatment can vary from TMJ and upper cervical spine work to breathing training and lumbopelvic control. Physios are experts at neuromuscular retraining and voicing is no different.

Are there any research areas the Performance Medicine team are currently examining?

We're trying to obtain data that will assist us to reliably differentiate between the symptoms of muscle tension dysphonia and a vocal fold integrity issue, as these two issues can clinically present in a similar way. Currently, we are undertaking data collection and analysis using the vocal tract discomfort scale—the only scale that has been validated for pathological throat pain and muscle tension dysphonia. We're analysing our data at the moment to see if we can find a pattern; I'm interested in using that data to set up a pilot study on pre- and post-treatment, focusing on how people respond to vocal unloading treatment.

Other than the small number of physiotherapists, are there many other Australian health professionals practicing vocal unloading?

I have recently run a course for speech pathologists. Traditionally in Australia, speech pathologists don't have sound training in laryngeal palpation and laryngeal biomechanics. Generally, speech pathologists don't palpate the neck unless they do a swallow assessment for dysphagia.

However, in the last 10 years there has been an increase in awareness from speech pathologists about the impact of the musculoskeletal system on voice production. They are now using some circumlaryngeal therapy and laryngeal manual therapy that has been developed for speech pathologists by international therapists. The vocal unloading courses for speech pathologists provide information about the anatomy of the larynx, as well as palpation assessment skills, and tips on safe stretches and exercises that they could provide their patients to help alleviate the musculoskeletal components contributing to their patients' dysphonia or throat pain.