Understanding the Process of Fascial Unwinding

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BACKGROUND  Fascial or myofascial unwinding is a manual therapy in which a therapist encourages a client’s body to move into areas of ease. It typically involves the client undergoing an induction procedure and this is usually followed by a spontaneous reaction. While its therapeutic effect is known clinically, its mechanism is not well known. The most accepted explanation is that tissues can hold memory independent of the nervous system; however this is yet to be proven.

HYPOTHETICAL MODEL  In this paper, an alternative model based on neurobiological theory is proposed to explain the process and mechanism of fascial unwinding [1,2]. In the first stage—the initiation or induction phase—the therapist working on a client will introduce touch or stretching onto the tissue. Touch is the entrance requirement for the process of unwinding. Touch stimulates the fascia’s mechanoreceptors and, in turn, arouses a parasympathetic nervous system response. The result of this response is that the client is in a state of deep relaxation and calm, sometimes followed with rapid eye movement, twitching, or deep breathing—a state that can be observed clinically. Stimulation of mechanoreceptors also influences the central nervous system. The central nervous system responds to this proprioceptive input by allowing the muscles to perform actions that decrease tone, or that create movement in a joint or limb making it move into an area of ease. At this point, automatism and ideomotor reflexes occur [2]. Automatism is an apparently voluntary behaviour that one does not sense as voluntary. Similarly, ideomotor action pertains to involuntary muscle movement, which can manifest in various ways, and is directed at the central nervous system. This unconscious movement or stretching sensation stimulates a response in the tissue, providing a feedback to the central nervous system as outlined in the theory of ideomotor action.

CONCLUSIONS  In bodywork literature it is generally accepted that fascia or connective tissues can hold memory and trauma. Although a specific touch or body positioning can trigger specific memory associated with it, the memory is still “stored” within the central nervous system. While fascia can contract and relax it is not shown that it can “unwind”. Studies have shown that it is impossible to generate immediate and permanent lengthening or unwinding of the fascia with mechanical means. Stimulation of mechanoreceptors is the most likely trigger of such release. Unwinding is therefore a consequence of the stimulation of parasympathetic nervous system resulting in automatism and ideomotor action. To test the proposed hypotheses, investigation involving the two main processes is required: the measurement of sympathetic nervous system activity, and analysis of ideomotor action. These investigations will also require researchers to explore neurobiological factor and psychological processes.

REFERENCES