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Understanding the concept of barefoot exercise science and its application in physical rehabilitation

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The only contact point between the body and the ground is feet, that is rich in 80% of plantar proprioceptors and play important role in controlling the body reacting to the upright movement. Human body is interconnected through fascia which is rich in small nerve fibres and free nerve endings. Any imbalances in foot must impact on the lower leg, which travels to the hip and pelvis, and then continues to the thoracic spine and shoulder affecting the fascial integrity. By Releasing the tight Fascia and ground up barefoot training, will strengthen the small muscles of foot, improving the ankle and foot mobility, correcting the poor joint alignment and destressing the soft tissue structures, correcting posture, improving balance and stability. Fascial sequencing exists via the Deep Front Line connecting the plantar foot with deep hip and pelvic floor. Studies have also shown that by training the foot to core sequencing you begin to establish feed forward and pre-activation sequences to enable faster foot to core stability. Rehabilitation of musculoskeletal issues, Sports injuries, Neurological conditions and training of athletes and runners, becomes more effective by Barefoot Exercise training proved by Dr. Emiley Splichal the Founder of Evidence based fitness academy (EBFA). Engaging Patient with Short foot exercise (single leg stance) activates the deep fascial line reinforcing foot to core stability. Integrating the Barefoot stimulation with foot to core fascial tensioning makes Rehabilitation more effective. Barefoot Exercise Science is the Scientific, Evidence based, inexpensive, and result based mode of Rehabilitation.

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Hypopressive training as a tool for the prevention and rehabilitation of pelvic floor dysfunction

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The pelvic floor has a fundamental role for postural control, proper breathing, and core function. The coordinated activity of the diaphragm, lumbar spine, abdominals and pelvic floor musculature influence postural control by regulating intra-abdominal pressure and by increasing tension in the thoracolumbar fascia. Based on this synergy, a variety of alternative pelvic floor muscle training programs have been proposed to enhance core and pelvic floor function. Hypopressive training (HT) is a breathing and postural exercise technique used in Europe for postnatal recovery and treatment of commonly encountered pelvic floor dysfunction including pelvic organ prolapse and urinary incontinence. HT is performed via short bouts of breath holding and inspiratory muscle contraction maneuvers interspersed with slow, deep breathing while maintaining different body positions. The bouts of breath holding are performed with a low lung volume which impacts the cardiovascular response due to a decrease in breathing frequency and oxygen saturation. HT focuses on elongation of the vertebral spine and pelvis with isometric and eccentric muscle actions through specific postures. The visceral decompression that is exerted due to the diaphragmatic aspiration during HT has been shown to contribute to urethrovesical angle mobilization and an increase in vascularization and thickness of the transverse abdominis & levator ani muscle. HT may be an alternative exercise program to retrain the core, restore pelvic floor function and improve respiratory function. Additional research is needed to examine the physiological effects of HT and the use of this training technique in fitness and rehabilitation centers.

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