Connective tissue disorders and pelvic floor muscle dysfunction: Is there a connection? By Stephanie Stamas, SPT

Connective tissue disorders (CTD) cause dysfunction in the structures that support, bind, and protect the organs of the body, such as bone, fascia, cartilage, muscle and skin. There are over 200 identified CTD’s with the majority of the disorders affecting women more than men. Some CTD’s are heritable, such as with Ehlers-Danlos Syndrome, Marfan Syndrome and Osteogenesis Imperfecta, although in most cases the cause is unknown. Here at Beyond Basics Physical Therapy, we have noticed that several patients not only report issues involving bowel, bladder, or sexual dysfunction, but also have a history of systemic issues including fatigue, general joint pain, Raynauds phenomenon or dryness. These complaints have led us to look into the possible relationship between pelvic floor muscle dysfunction (PFMD) and connective tissue disorders, specifically Ehlers-Danlos syndrome and Sjogren’s syndrome.

Ehlers-Danlos Syndrome (EDS) is a genetic CTD resulting from defective synthesis of collagen. Collagen is a foundational matrix in the body which forms skin, bone, blood vessels, organ capsules and other body structures. There are several subtypes of the syndrome, each affecting a different type of collagen and therefore presenting with different symptoms. Hypermobility-type EDS is the most common subtype and presents with general joint hypermobility, chronic subluxation, skin elasticity, easy bruising and chronic joint pain\(^1\). Classical-type EDS also presents with general hypermobility and skin extensibility but has increased skin involvement, such as tissue fragility and atrophic scarring over bony prominences\(^2\). The relationship between EDS and PFMD has been explored in several studies and a correlation between dyspareunia (painful intercourse), stress urinary incontinence, pelvic organ prolapse and EDS have been identified, with the trend toward increased symptoms with classical-type EDS\(^1,2,3,4\).

Sjogren’s Syndrome (SS) is an autoimmune CTD where the body attacks the moisture producing (exocrine) glands of the body leading to the hallmark signs of dry eyes and/or dry mouth. This is the second most common rheumatic disease and primarily affects women (9:1 ratio). Another common complaint in this population is vaginal dryness, causing dyspareunia is up to 65% of women with SS\(^5\). A study by Mulherin et. al., examined women with chronic dyspareunia, Raynaud’s phenomenon, chronic joint pain and dry eyes and/or mouth and found that 63% of these women had either a definite or probable diagnosis of SS\(^6\). In all but one of the women, vaginal dryness presented before ocular or oral symptoms.

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Connective tissue disorders are difficult to identify and can take years until a correct diagnosis is made. It is therefore important that individuals with a suspected connective tissue disorder are evaluated and treated by a multidisciplinary team with an experienced rheumatologist as the primary care provider. Early diagnosis is especially important with individuals with SS because they have a 20 times increased risk of developing lymphoma than the general population\(^7\). If you suspect that you are dealing with a systemic issue, please inform your physical therapist at Beyond Basics Physical Therapy so that you can receive a more focused, comprehensive and effective plan of care.

**References**