

Pelvic Floor Dysfunction: Reinventing the Spokes of the Wheel.

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“Life is a tragedy of nutrition”

Arnold Ehret

Breathing, food, water, sex, sleep, homeostasis and excretion form the foundation of the Maslow's pyramid of hierarchy of needs. Abraham Maslow gave his yet unchallenged theory on human development psychology after studying the healthiest 1% of the student population¹ and established the indispensability of these founding needs to the overall psychological well being. These deficiencies needs have to be met to ensure a stress free individual to even desire any higher level needs of well being. This scientific theorization is easily supported by the age old wisdom emphasizing the need of good eating and good bowels being mandatory for good health.

One of these fundamental needs i.e. satisfactory movements of bowels is a commonly sought remedy in surgical practice. Commonly termed as constipation, it defies any universal definition owing to heterogeneity of social, geographical, cultural, dietary and many other backgrounds. Constipation is an index symptom of anorectal disturbances which in itself has become an index clinical parameter for pelvic floor dysfunction. Pelvic floor is a sophisticated mechanization of a complex of voluntary and involuntary muscles, supporting ligaments, fascial encasings and a complex neural wiring². For it to function properly, all these constituents have to function in a harmonious and integrated manner. It is this complexity in structure and function that necessitates an understanding of the various symptom complexes in relation to different compartments of the pelvic floor³. The three compartments i.e. anterior, middle and posterior constitute the three spokes in the wheel of pelvic floor. The analogy of the wheel is most apt to pelvic floor because of the later being a very dynamic engine of body accepting and rejection things according to the physical needs. The interdependence of mechanical, neural, endocrine and environmental factors is most akin to those of the spokes to the wheel.

Any suboptimal understanding of these “spokes” leads to neglect of clinical symptoms, low prioritization of pelvic floor disorders and unsatisfactory treatments³. This leads to a major public health issue with strong psychosocial and economical implications resulting in poor quality of life outcomes⁴. While pelvic floor dysfunction is seen to be related to lower urinary tract symptoms and to lower gastrointestinal symptoms, it is an influential factor in dysfunction and subsequent behavior of the genital system⁵. Although the pelvic floor syndromes affect both genders, their early identification and preponderance in females has led to much scientific interest in dealing with them to improve the quality of life in females⁶.

The three spokes of the pelvic wheel function as a unit, malfunctioning of either of these compromises the functioning of the remaining two. The wheel failure may be brought on by either or all of the spokes. Posterior pelvic floor disorders are the most commonly reported ones hence seen as indices of the functioning of the anterior and middle compartments as well. Posterior compartment failure manifests as prolapse, pelvic heaviness /pressure, stool trapping, fecal incontinence and constipation. The anterior

compartment, failure symptomized by dysmicturition has long been a favorite playground for surgeon within the stadium of LUTS i.e. lower urinary tract symptoms. Complexity of the structural function of the pelvis and its suboptimal understanding has led to a vast unsatisfied anorectal population given the indexity of anorectal symptoms. In reality much of this dissatisfaction emanates from sociocultural reluctance of patients to express their middle compartment and an equal reluctance from the surgeon to tread upon the middle ground. Many a times it is the symptom complex from the mid pelvic floor that is the cause of dissatisfaction. Proper functioning of the mid pelvic floor is a mandatory prerequisite for all the four phases of sexual response i.e. desire leading to arousal, their plateau, followed by orgasm and resolution in females⁷ as well as in males⁸. Studies in females indicate that even a trivial biking induced pelvic floor insult leads to altered genital vibratory thresholds and suboptimal sexual function⁹. The artificial compartmentalization of symptoms of pelvic floor can lead to suboptimal clinical management leading to a dissatisfied patient. This compartmentalization² and resulting partitioning of the patients into urology, surgery and gynaecology is like redesigning the individual spokes of the wheel in three different locations. Hence to ensure a well wheeled pelvic floor, an understanding of the interplay of all the three spokes of pelvic wheel is required to achieve patient's satisfaction. There is a popular medical adage “when you are in Texas and you hear hoof beats, think horses, not zebras”. Hence any pelvic floor disorder symptom must alert us to evaluation of pelvic floor in totality and not in compartments. This reminds us of the diagnostic parsimony, based upon Occam's razor in medicine that advocates that when diagnosing a given disease a doctor should strive to look for the fewest causes that account for all the symptoms.

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