BRIEF COMMUNICATION

Pelvic Obesity: Clinical Aspects

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ABSTRACT

Obesity is a multisystemic chronic disease, which is associated with various pelvic pathologies and abnormalities. We suggest a novel term: pelvic obesity, which is defined as a syndrome of morphological and functional abnormalities in the pelvic cavity and its organs that are associated with obesity and result in genitourinary, reproductive, and systemic dysfunction. This communication enumerates the diverse aspects of pelvic obesity and elucidates the rationale for a unified, multidisciplinary approach.

Keywords: Lipomatosis, LUTS, obesity, overweight, pelvic floor dysfunction, prostate, sexual dysfunction

CLINICAL OBESITY

The clinical presentation of obesity is multifaceted and it is a multisystemic chronic disease with a multifactorial etiology[1]. The term "clinical obesity", which was recently introduced, delineates 18 clinical characteristics of the syndrome in adults. In women, these conditions include anovulation, oligomenorrhea, and polycystic ovary syndrome (PCOS), while in men, they include hypogonadism[2]. Recurrent/chronic urinary incontinence is also noted as a complication of obesity, regardless of gender. The list of 11 conditions that characterize clinical obesity in children and adolescents also includes PCOS[2].

PELVIC MANIFESTATIONS OF OBESITY

The impact of obesity on the genitourinary system however, extends far beyond these diseases. Obesity leads to various morphological and functional changes in the pelvic cavity. These changes, in turn, lead to a wide range of urinary, genital, sexual, reproductive, and metabolic abnormalities[2]. We term this as *Pelvic Obesity*.

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SCOPE AND SPECTRUM

We define pelvic obesity as a constellation or syndrome of morphological and functional abnormalities in the pelvic cavity and its organs, associated with obesity, which lead to genitourinary, reproductive, and systemic dysfunction[3]. Table 1 lists various facets of pelvic obesity. While some of these are specific to women or men, others are gender-agnostic. All are associated with obesity to a varying extent. Some of the conditions are known to improve with weight reduction, while others may not. Some of the conditions we list are imaging abnormalities (pelvic lipomatosis, lipomesosalpinx), while others are syndromes in their own right (PCOS, pelvic floor dysfunction, lower urinary tract syndrome [LUTS])[4]. Most of the conditions listed have a multifactorial pathogenesis, but obesity plays an important role in their progression and outcome.

While the spectrum of discourse on obesity is expanding, it still remains focused on vasculometabolic and psychosocial aspects of the syndrome. The term pelvic obesity brings together seemingly disparate gynecological, urological, medical, and radiological conditions, as a single entity. This enhances awareness and understanding, promotes screening and timely diagnosis, and encourages the institution of appropriate preventative and curative measures. It also fosters multidisciplinary person-centered care of individuals with pelvic obesity leading to improved patient satisfaction and outcomes.

CLINICAL IMPLICATIONS

It is recommended that obesity care professionals integrate the assessment of pelvic obesity parameters into

Table 1. Pelvic Obesity

Pelvic floor dysfunction
- Urinary or fecal incontinence
- Defecatory dysfunction
- Chronic pelvic pain

Lower urinary tract syndrome (LUTS)
- Dysuria
- Suprapubic discomfort
- Urgency
- Strangury

Sexual dysfunction
- Female
- Male

Urolithiasis
- Urate stones

Pelvic lipomatosis
- Common in hypertensive men

Prostatic abnormalities
- Benign prostatic hypertrophy
- Prostate cancer
- Prostatitis

Female genital tract abnormalities
- Ovaries
  - Polycystic ovary syndrome
- Fallopian tubes
  - Lipomesosalpinx
- Uterus
  - Abnormal uterine bleed
  - Fibroids
  - Adenomyosis
- Cervix
  - Cervical cancer
- Vagina and vulva
  - Altered vaginal microbiome
  - Bacterial vaginosis
  - Recurrent vulvovaginal symptoms

their current anamnesis and examination. It is also imperative that they are cognisant of and cultivate the necessary skills to effectively manage individuals with pelvic dysfunction. This will necessitate an understanding of a variety of diagnostic and therapeutic strategies. Although the primary obesity care professional may prescribe medical therapies, invasive and surgical interventions are most effectively provided at tertiary centers. Referral to a gynecologist, urologist, or andrologist may be required in some cases.

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