

Association of central obesity with chronic lower urinary tract symptoms in females

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Introduction: Worldwide the prevalence of obesity has been increasing. Pakistan is also affecting because of increasing trend towards obesity. The relationships between central obesity and lower urinary tract symptoms (LUTS) have not been well studied in females. **Objectives:** The aim of our study was to determine the association between central obesity and LUTS in women. **Methodology:** The single centre prospective study was conducted, after ethical approval. 315 women were recruited after informed consent. Exclusion criteria were women with < 20yrs of age, neurological condition affecting bladder functions (such as dementia, stroke, multiple sclerosis, spinal cord injury and Parkinson's disease) and urinary tract infection. Demographic data include age, marital status, smoking history, menopausal status, occupation, constipation, parity and history of pelvic surgery. All information was gathered in predesigned proforma. Urinary symptoms were assessed using the LUTs tool with one week recall period. **Results:** Total 315 females were evaluated in our data, with mean values of 40.9+_13.2 years of age, 98.6+_13.3cms of waist circumference, 67.2+_14.9 kg of weight and 157.3+_9.5cms of height. There were 70 (22.2%) with less than 88cms of waist circumference and 245 (77.8%) with >88cms of waist circumference (centrally obese). Presence of LUTS recorded in 183(58.1%) of females. Hence, 154 females with central obesity noticed one or more symptoms of LUTS indicating p-value <0.005. Odds ratio of getting LUTS with central obesity is 0.418(0.24-0.718) indicating positive association. **Conclusion:** More than half of patients were centrally obese and LUTs were more prevalent. Urgency and urge incontinence reported more frequent than hesitancy. Lower urinary tract symptoms (LUTS) are common in women of all ages, especially between the ages of 40-60. For many women, the symptoms come and go. But for some women, the symptoms are ongoing and interfere with normal life. The symptoms may include wetting yourself (incontinence), needing to pass urine frequently, or discomfort passing urine. These and other symptoms can result in poor quality of life. Many women never tell anyone about their symptoms. Your doctor may

recommend tests to look for an underlying cause. Referral to a specialist is not usually needed. Often, no specific underlying cause is found. Treatment may help to relieve symptoms. Urgency is a symptom where you have a sudden, urgent desire to urinate. You are not able to delay going to the bathroom. In urge incontinence, urine flows before going to the bathroom when you have an emergency. Urge and urge incontinence is often caused by an unstable or overactive bladder, or detrusor instability. (The detrusor muscle is the medical name for the bladder muscle.) Bladder training exercises are the first line of treatment. Medication can also help. Some people have mixed incontinence, which is both stress incontinence and urge incontinence. Stress incontinence is the most common form of incontinence. This means that you are leaking urine with actions such as coughing, laughing, sneezing, or exercising. It happens when the pelvic floor muscles that support the bladder are weakened. Childbirth is a common cause of a weak pelvic floor. The first treatment for stress incontinence is pelvic floor exercise. Surgery to tighten or support the outlet of the bladder can also help. Medication can be used in addition to exercise if you are unwilling or unsuitable for surgery. Some people have mixed incontinence, which is both stress incontinence and urge incontinence. You should always see your doctor if you develop incontinence. Each type has different treatments. See the separate leaflet called Urinary Incontinence for a general overview and to understand what is likely to happen during your doctor's assessment. You may have an ultrasound on your bladder and urinary tract. You may be referred to a specialist (urologist) for tests on your urinary system (urodynamic tests). Urodynamic studies test how the bladder works and are used to see how the urinary system and pelvic floor are functioning. You may be asked to keep a journal. In your journal, write down the time you urinate and the amount (volume) you urinate each time. Also note the times you leak urine (if you are incontinent). Your doctor or nurse may have pre-printed agendas to give to you for this purpose. Keep an old graduated jar near the toilet (you will need to urinate directly into it) so you can measure how much urine you

produce each time you use the toilet. If you have unexplained blood in your urine, you will be referred urgently to a urologist for further testing.

Treatment for AUS will depend on the underlying cause. Often, no specific cause is found and therefore there is no specific treatment. Some women find that their symptoms come and go and don't cause them much embarrassment or distress. But if your SBAU is interfering with your normal life, you should see your doctor for advice. A clinic specializing in incontinence can offer help, which can advise you on pelvic floor exercises and how to cope with incontinence. Incontinence nurses can also advise you on electrodes and catheters. Medication can be effective in relieving symptoms of an overactive bladder if there is not enough improvement with bladder training alone. These drugs work by blocking certain nerve impulses to the bladder which relaxes the bladder muscle, thereby increasing the capacity of the bladder. These drugs are called antimuscarinics (or anticholinergics). There are many types and many different brands. They include oxybutynin, solifenacin, and tolterodine. HRT can relieve symptoms of menopause, including vaginal dryness and discomfort when urinating. Surgery may be needed to repair or boost your pelvic floor in some cases. You may be referred to a specialist if your symptoms do not improve after self-help measures and treatment from your doctor. Lower urinary tract symptoms (SBAU) are the name given to a group of symptoms including dysuria and incontinence. The term was first coined in the 1990s to describe symptoms in men that were previously known as prostatitis, to help recognize that these symptoms were not always due to prostate problems and to reduce unnecessary prostate surgery. It was then expanded to cover a "group of non-sex-specific, non-organ-specific symptoms, which are sometimes age-related and progressive". Nevertheless, the term LUTS is more often applied to men, and the National Institute for Health and Care Excellence (NICE) has produced guidelines on the subject that apply only to men. An underlying cause is often not found. SBAUs come and go and will resolve spontaneously in almost half of the cases. Experts recommend making a specific diagnosis when possible and treating any underlying cause. However, some urologists also urge doctors not to over-investigate women and appropriately reassure them if there is no reason to suspect a serious underlying disease. The International Continence Society has divided UBS into

three categories, Storage Symptoms: eg, frequency, urgency, dysuria, nocturia, stress incontinence, urge incontinence. Voiding symptoms: p. eg, insufficient flow, hesitation, terminal dribbling, overflow incontinence (due to chronic urinary retention). Post-voiding symptoms: p. eg, incomplete emptying, post-voiding dribbling.

When taking a history of SBAU, be sure to clarify the exact nature of the lower urinary tract symptoms present, establishing whether the symptoms are primarily voiding or stored, as this can help determine the underlying pathology. Learn about associated symptoms, such as visible hematuria, suprapubic discomfort, or colic, and their drug history, as some medications, including anticholinergics, antihistamines, and bronchodilators, are known to exacerbate AUS. A digital rectal exam and / or examination of the external genitalia may be helpful, depending on the presentation. The International Prostate Symptom Score can be a useful tool to assess and monitor the impact of AUS on men's quality of life, both initially and throughout any treatment. The initial management is usually the treatment of the underlying condition. However, there are a number of conservative measures that may be helpful in the initial management of AUS in some patients while the investigation of the underlying cause is ongoing. Regulating fluid intake, such as the timing and volume of drinks consumed and reducing caffeinated and alcoholic drinks in the evening, is important for all patients. People with voiding symptoms may benefit from urethral milking * techniques (manually emptying the bulbar urethra of residual urine) or double urination (urinating and then staying for a short time before urinating again). Pelvic floor exercises to strengthen the pelvic floor are helpful with stress incontinence or post-voiding dribbling. Bladder training techniques, which aim to increase the time between the urge to urinate and urination, when done correctly (under supervision), can be useful in overactive bladder. . Particularly useful in men with significant post-micturition dribble. Pharmacological therapies are often offered to patients in whom conservative measures are insufficient or inappropriate. Helping to relax bladder muscle by opposing parasympathetic cholinergic control of contraction. Mirabegron, a β_3 adrenergic agonist, can also be useful in managing overactive symptoms. Alpha blockers (e.g. alfuzosin, tamsulosin) and / or 5 α -reductase inhibitors (e.g. finasteride) for BPH can help in reducing prostate size by relaxing prostatic muscle. Loop

diuretics (e.g. furosemide, bumetanide), though unlicensed, could also be taken mid-afternoon to stop nocturia. Desmopressin is additionally unlicensed but has been shown to assist in reducing nocturia. Left untreated, progressive LUTS may increase the danger of infection and formation of renal and bladder calculi thanks to

stagnation of urine. Chronic obstruction may cause bladder wall muscle hypertrophy or distention which may cause enuresis. Renal complications include kidney failure and bilateral hydronephrosis. Acute retentiveness can also occur in patients with progressive BPH.