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BODY MASS INDEX AND URINARY SYMPTOMS IN WOMEN

Aims of Study

In developed countries the prevalence of obesity has increased greatly over the past few years. Obesity is linked to diabetes, lung and cardiovascular disease but little is known about it in women with urinary disturbances.This study was designed to determine whether Body Mass Index (BMI) and lower urinary tract symptoms could be associated.

Methods

468 consecutive women with urinary disturbances underwent a full urogynaecological work-up which included case history, clinical examination with assessment of vaginal profile sec. Baden and Walker, urogynaecological ultrasound, urodynamic test. Incontinence was graded on the SEAPI-QMN scale (G1, G2 and G3). The physician administered questionnaire provided demographic and anthropomorphic data, and medical history, focussing on genital-urinary symptoms. Patients were divided into two groups on the basis of BMI, (height divided by weight squared) BMI ≤ 26.0 = underweight/normal; BMI >26.0 = overweight/obese and compared for several clinical variables (see Table 1). The Chi square test and the Mann Whitney test for non parametric data were used for statistical analysis.

Results

BMI was ≤ 26.0 in 262 (**56%)** patients. Table 1 shows the results.

Tab. 1

	BMI ≤ 26	**BMI > 26**	**P**
Mean age (years)	58	57	NS
Parity	2	2	NS
Constipation	52%	43%	NS
Menopause	74%	88%	**0.000**
Previous surgery	33%	37%	NS
Incontinence	72%	83%	**0.01**
Obstruction	49%	45%	NS
Irritative symptoms	57%	64%	NS
Sexual Intercourse	68%	33%	**0.000**
Urethrocele >2°	19%	19%	NS
Cystocele >2°	29%	28%	NS
Dysuria/Stranguria	40%	40%	NS
Urgency	36%	50%	**0,003**
Abdominal straining	31%	29%	NS
Staccato micturition	41%	47%	NS
Incomplete voiding	48%	48%	NS
Perineal heaviness	38%	41%	NS

Conclusions

Unlike the United States, less than half the women in our Italian series are overweight or obese.

Menopause is clearly correlated with an increase in BMI because it leads to a relative androgenization and an increase in androgen type weight distribution. Obesity is related with a loss of sexual activity. This may be due to difficult and unsatisfactory interpersonal relationships, lack of self-confidence, poor body image and social conditioning. The link between obesity and urgency is surprising. A weight induced increase in intra-abdominal

pressure could contribute to urgency by reducing bladder capacity. Obesity is often associated with urinary incontinence. Some studies in pregnant women have correlated high pre-pregnancy BMI with increased risk of urinary incontinence. Bump observed a rapid weight loss after gastric bypass surgery was associated with a significant reduction in incontinence. High BMI is reported to negatively influence outcome after surgery for urinary incontinence.
Although a direct cause/effect between obesity and urinary incontinence has not been established weight loss is recommended in the management of obese incontinent women. In candidate for surgery weight loss preoperatively helps improve the patient's general condition.

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References
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