

1075

Zeng X<sup>1</sup>, Luo D<sup>1</sup>, Shen H<sup>1</sup>

1. Department of Urology, Institute of Urology, West China Hospital, Sichuan University

## CORRELATION BETWEEN ALPP AND BMI IN ADULT FEMALE PATIENTS WITH STRESS URINARY INCONTINENCE

### Hypothesis / aims of study

To identify the correlation between abdominal leak point pressure (ALPP) and body mass index (BMI) in adult female patients with stress urinary incontinence (SUI).

### Study design, materials and methods

78 SUI patients were enrolled in this study, a mean age of 62.5±22.5 years.. The BMI was recorded, and the ,ALPP was also measured. The correlation between each groups were analyzed.

1. Body Mass Index(BMI):Measure the patient's height and weight ,then calculating BMI according to the formula (BMI= weight/height kg/m<sup>2</sup>).
2. Urodynamic parameters: Multichannel urodynamic evolution was performed according to the International Continence Society(CIS) guidelines on urodynamic equipment performance . Our study also included a pressure flow study, which included information about abdominal leak point pressure (ALPP) .And all urodynamic studies were did by one experienced urodynamic technician form urodynamic center, and all urodynamic reports were interpreted by experienced urologist.
3. Statistical analysis: The data were calculated and presented as the mean and the standard deviation of the mean (SD) by SPSS 13.0 software. The Correlations between BMI and these urodynamic parameters were tested by the Pearson and Spearman test.With statistically significant difference set as P<0.05..

### Results

Our study found that the BMI was associated with the level of ALPP, which had a positive correlation between each other(r = 0.479, P < 0.05).(figure1)

### Interpretation of results

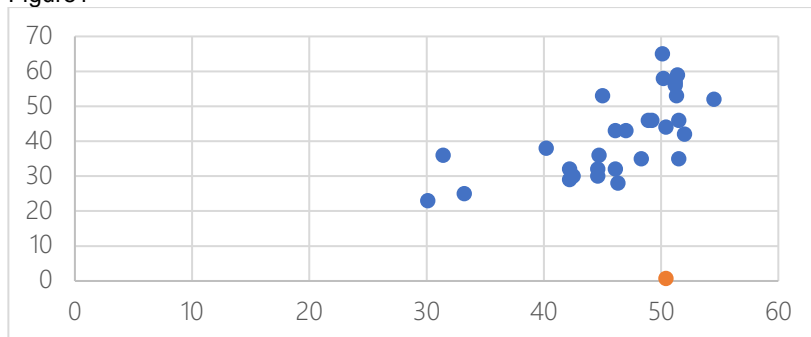
The BMI is more heigher, the SUI symptoms are more worsen, and the patient's ALPP were also increased, but the ability to control urine is reduced. Some other studies showed that ,obesity on the one hand has led to an heigher abdominal pressure load, on the other hand a lot of fat accumulated in the obese patien's pelvic tissues has made the effect to buffer the pressure, resulting in pressure transmission attenuation, eventually led to decrease patient's ability to control urine.

### Concluding message

The BMI was positively correlated with ALPP, which is meaningful to the prevention and diagnosis of adult female patients with stress urinary incontinence.The BMI is more high , the SUI symptoms is more worse .

The limitations of our study also be acknowledged as this is a retrospective data study , the types of data and available are limited.

Figure1



### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics committee of west china hospital of SiChuan university **Helsinki:** Yes **Informed Consent:** Yes