

OBESITY AND PELVIC ORGAN PROLAPSE : INFLUENCE ON THE TREATMENT SELECTION.

Hypothesis / aims of study

Pelvic organ prolapse (POP) with multifactorial etiology is a common condition. Obesity is a one of the significant risk factor for the development of POP. The chronically increased abdominal pressure is a mechanism through which obesity increases the development of POP. And in the prevention of primary POP, obesity is the only modifiable risk factor.

On the other hand, for the treatment of POP, support and repositioning of prolapsed of pelvic organs is the common indication for vaginal pessary usage. The aim of vaginal pessary usage in the management of POP is to prevent worsening of the prolapse, decrease the frequency and severity of symptoms and to avert or delay the need for surgery.

The aim of this study is to clarify the impact of the obesity for the treatment selection of POP.

Study design, materials and methods

A total 246 women diagnosed as POP stage III between January 2009 and December 2015 were retrospectively reviewed. All patients were treated with vaginal pessary first. If the treatment was failed, the patients were treated with surgical therapy. All patients had undergone a pretreatment evaluation in which their body mass index (BMI), subcutaneous fat area (SFA), visceral fat area (VFA), total fat area (TFA), VAF to TFA ratio, abdominal circumference (AC) and AC to height ratio were determined. Abdominal fat distribution was measured by using CT. Subcutaneous and visceral fat areas were measured on one cross-sectional scan obtained at the level of the umbilicus (approximately the level of L4 and L5). Patients who could be treated with vaginal pessary usage for more than one year and who treated trans vaginal mesh (TVM) procedure were compared. Mann Whitney U test and unpaired student t-test were used to statistical analysis.

Results

A total 246 patients enrolled this study. After 31 patients were drop out. 215 patients were treated. 58 patients could be treated with vaginal pessary usage for more than one year. Surgical treatment was selected 179 patients. According to surgical procedure, native tissue repair were 36 patients and TVM were 121 patients. Mean age of pessary group was 69.7 years old and TVM group was 68.8 years old. There were no statistically significant difference between pessary group and TVM group.(Table 1)

Table 1. Relationship between obesity and treatment selection.

	Pessary group	TVM group	P value
BMI (Kg/m ²)	24.87	25.03	0.749
VFA (cm ²)	112.4	118.9	0.439
TFA (cm ²)	279.1	284.0	0.760
VFA / TFA ratio (%)	40.2	39.6	0.731
AC (cm)	81.8	83.1	0.398
AC / Hight ratio (%)	54	55	0.428

Interpretation of results

There was no significant difference in the index of obesity between pessary group and TVM group.. In this series obesity was mild and severe obesity cases were rare. Other factors, such as the POP-Q stage, may affect the treatment selection.

Concluding message

Obesity is a one of the significant risk factor for the development of POP. But obesity did not affect the treatment selection for POP.

References

1. Radiology 1999; 211: 283-286

Disclosures

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