

PE8. — WAIST TO HIP RATIO BETTER PREDICTS ONCOLOGICAL SHORT- AND LONG-TERM OUTCOME AFTER RECTAL CANCER SURGERY THAN BODY MASS INDEX.

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Whether body fat distribution, measured by Waist-hip Ratio (WHR), better predicts oncological short- and long-term outcome after rectal cancer resection than body mass index (BMI) is determined.

A prospective multi-centre international study explored the effect of obesity on postoperative outcome in patients undergoing elective colorectal surgery. Patients operated for rectal cancer were extracted from this database and long-term follow-up was obtained. Influence of WHR on oncological outcome was analysed by uni- and multivariable analysis. The effect of obesity on overall and recurrence-free survival was assessed using Cox proportional hazard models.

Out of 1349 patients from 38 centres in 11 countries included in the initial prospective trial, 295 patients (mean age : 64.6y +/- 12.5 ; 179 males, sex ratio M/F : 1.5) from 24 centres in 8 countries underwent elective surgery for rectal adenocarcinoma. Mean BMI was 25.3 +/- 4.4 and WHR 0.96 +/- 0.12. Medical complications occurred in 51 patients (17.3%), surgical complications in 81 (27.5%). In-hospital mortality was 0.7%. Median follow-up was 44.2 months (0.6-65.7). Multivariate analysis showed that WHR was predictive of TME quality and postoperative surgical complications. BMI on the other hand was associated with wound complications and reoperations. Other surrogates for oncological outcome, i.e. pCRM, distal margin involvement and number of lymph nodes retrieved were not significantly influenced by either WHR or BMI. WHR was an independent prognostic factor of overall recurrence, but not of overall survival. WHR was more effective than BMI in predicting quality of TME surgery and overall recurrence.