Orals

001   PROPHYLACTIC MESH PLACEMENT DURING FORMATION OF AN END-COLOSTOMY LONG TERM RCT ON EFFECTIVENESS AND SAFETY

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Aim: To determine if prophylactic mesh placement is an effective, safe, and cost-effective procedure to prevent parastomal hernia (PSH) formation in the long term.

Material and Methods: In this multicenter superiority trial patients undergoing formation of a permanent colostomy were randomly assigned to either retromuscular mesh reinforcement or conventional colostomy formation. The primary endpoint was the incidence of a PSH after 5 years. Secondary endpoints were morbidity, mortality, quality of life and cost-effectiveness.

Results: A total of 150 patients were randomly assigned to the mesh group (n = 72) or non-mesh group (n = 78). For the long term follow up, we could analyse 113 patients since 37 patients were lost to follow-up. After a median follow-up of 60 months (IQR 48.6 – 64.4), 49 patients developed a PSH, 20 (27.8%) in the mesh group and 29 (37.2%) in the non-mesh group (p = 0.22; 95% CI -24 – 5.5). A total of 25 patients developed an incisional hernia, seven in the mesh group (10.4%) versus 18 in the non-mesh group (27.2%) (p = 0.013, 95% CI 3.5 – 30.0). No relevant differences were found in quality of life or cost-effectiveness between both study group.

Conclusions: Use of a prophylactic retromuscular mesh at the ostomy site delays but not reduces the incidence of PSH after 5 years of follow-up. It leads to less severe PSH according to the EHS and MM classification with fewer repairs needed. Furthermore it causes patients to have fewer stoma related complications necessitating change of appliances and it is safe without any adverse events or increase in morbidity.