Pelvic Imaging

Frank Pfeffer

**Title:** New trends in rectal cancer surgery and challenges to preoperative imaging.

**Abstract**

Oncological results of rectal cancer treatment has improved impressively over the last 2 decades. Surgical technique (total mesorectal excision, TME), multidisciplinary approach and use of preoperative radio-chemo therapy has been cornerstones. Despite this, functional results are poor and the number of permanent stoma is high (30%). Due to a narrow pelvis, surgery can be demanding. New approaches with use of robotic surgery and combined transanal / laparoscopic surgery are promising new developments in this field.

Noeska Smit

**Title:** The Virtual Surgical Pelvis - Anatomical Visualization for Education and Surgical Planning

**Abstract**

Pelvic anatomy is often considered to be complex. Pelvic oncological surgery demands excellent anatomical knowledge to completely resect tumours without damaging vital structures. In doing so, surgeons are challenged to relate 2D textbook anatomy to 3D in vivo anatomy, and rely on their visual feedback rather than tactile feedback when laparoscopic and robotic techniques are being used. In rectal cancer surgery, incomplete resections and iatrogenic nerve damage are still reported, reflecting the need to optimize anatomical education. In this talk the development and application potentials of the ‘Virtual Surgical Pelvis’ (VSP): a virtual 3D patient-specific anatomical atlas are discussed.