OP17 Robotic Versus Conventional Surgery: An Overview Of Systematic Reviews For Clinical Effectiveness With Quality Assessment Of Current Evidence

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Introduction. Robot-assisted surgery (RAS) is being adopted rapidly internationally across a wide range of surgical procedures. Although a great deal of evidence of the clinical effectiveness of RAS has been generated, it is possible that the evidence base is not complete or persuasive in some areas where adoption is being considered. This review seeks to summarize systematic reviews (SRs) undertaken to date to illustrate the weight of evidence across specialties. We then take an in depth look at the quality of evidence across several indications where the adoption of RAS is currently underway.
Methods. A comprehensive literature search was conducted using Ovid Medline, Embase, and Cochrane Central Register of Systematic Reviews from January 2017 to April 2021 for SRs describing clinical effectiveness outcomes. The body of evidence was mapped across all specialties. For a selected number of indications currently under consideration in Scotland, results were comparatively summarized, and the quality of the reviews was evaluated with the AMSTAR-2 tool.
Results. A total of 451 SRs were found. Most were in urology (n = 130) where RAS is well established, followed by colorectal (n = 63), hepatology (n = 58), and gynecology (n = 41). From within these latter three specialties, we selected six indications in which RAS is currently being considered for adoption in Scotland for in depth review (colorectal cancer surgery, hysterectomy, gastrointestinal oncological resection, hepatic, pancreatic and biliary surgery). Evidence for the clinical effectiveness of RAS versus conventional laparoscopic surgery is mixed across indications and outcomes. In colorectal cancer surgery, for example, evidence was positive for conversion rate and neutral for length of hospital stays, blood loss and postoperative complication and negative for operative time. For hysterectomy, evidence was positive for the length of hospital stays and neutral for operative time, blood loss, conversion rate and postoperative complication. The quality of the included reviews was judged to be critically low.
Conclusions. The currently available evidence of clinical effectiveness is mixed across indications and of low quality.

OP18 Clinical Effectiveness And Safety Of Implantable Bulking Agents For Fecal Incontinence: A Systematic Review

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Introduction. The purpose of this systematic review is to evaluate whether implantable versus injectable bulking agents (second-line therapies) are equal/superior in terms of effectiveness (severity, quality of life [QoL], sustainability) and safety (adverse events) for fecal incontinence (FI).
Methods. A systematic review was conducted and five databases were searched (Medline via Ovid, Embase, Cochrane Library, University of York Centre for Reviews and Dissemination, and International Network of Agencies for Health Technology Assessment database). In-/exclusion criteria were predefined according to the PICOS scheme. The Institute of Health Economics risk of bias (RoB) tool assessed studies' internal validity. According to the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) approach, the strength of evidence for safety outcomes was rated. A qualitative synthesis of the evidence was used to analyse the data.
Results. Six prospective uncontrolled trials (143 patients) were included. The evidence consists of six prospective single-arm, before-after studies fulfilling the inclusion criteria for assessing clinical effectiveness and safety for implantable bulking agents. FI severity (Cleveland Clinic FI Score) statistically significantly improved to three months ($p<0.01$) and six months ($p<0.05$) follow-up (five studies). Improvements in severity sustainability were reported after 12, 14 ($p<0.01$), and 36 ($p<0.0001$) months postoperatively. Improved disease-related QoL (FI QoL Score) was found ($p<0.05$) 12 months after surgery, and statistically significant improvements in QoL's sustainability after 12 months (one study).
Procedure-related adverse events (n=3) occurred, where prostheses extruded during surgery, and anal discomfort/pain was felt (n=11). Device-related adverse events, i.e., prostheses' dislodgement (n=31) and removed/extruded prostheses (n=3), occurred. Studies were judged with moderate/high RoB. The strength of evidence for safety was judged to be very low.
Conclusions. Implantable bulking agents might be an effective and safe minimally invasive option in FI treatment if conservative therapies fail. FI severity significantly improved, but not QoL, which needs to be explored in further studies. Due to the uncontrolled nature of the case series, comparative studies need to be awaited.

OP19 Comparative Effectiveness Of Common Treatment Options For Benign Prostatic Hyperplasia: A Systematic Review And Network Meta-Analysis

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Introduction. Treatment options for men with moderate-to-severe lower urinary tract symptoms due to benign prostatic hyperplasia (BPH) include medical therapy, minimally invasive surgical therapies (MISTs), and invasive surgical procedures. While these treatments are recommended by American Urological Association Guidelines,

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