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HETEROGENEITY IN REPORTING ON URINARY OUTCOME AND CURE AFTER SURGICAL INTERVENTIONS FOR STRESS URINARY INCONTINENCE IN ADULT NEURO-UROLOGICAL PATIENTS: A SYSTEMATIC REVIEW.

Hypothesis / aims of study

The aim of this systematic review was to describe all outcome parameters and definitions of cure used to report on outcome of surgical interventions for stress urinary incontinence (SUI) in neuro-urological (NU) patients.

Study design, materials and methods

This systematic review was performed and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement. Medline, Embase, Cochrane controlled trials databases and clinicaltrial.gov were systematically searched for relevant publications until December 2015. All publications of original studies that used a predefined urinary outcome parameter or a definition of success or cure to report on outcome of surgical interventions for SUI in adult NU patients were included. All used outcome parameters and definitions of cure were summarized and compared. Outcome parameters containing information from questionnaires and patient interviews were considered subjective outcome parameters. Outcome parameters were considered objective when derived from voiding diaries, pad tests, cough stress-tests or urodynamic investigations. Risk of bias and confounder analyses were performed.

Results

A total of 2,892 abstracts were screened. Fifteen studies reporting on SUI surgeries in NU patients were included. Fifteen different outcome parameters and eight definitions of cure were used. Five studies reported on objective outcome parameters mainly derived from urodynamic investigations. All studies reported on one or more subjective outcome parameters. Patient-reported pad use (reported during interview) was the most commonly used outcome parameter. Only three of 15 studies used standardized questionnaires (two on impact of incontinence and one on quality of life). Overall, a high risk of bias was found.

Interpretation of results

We found a considerable heterogeneity in outcome parameters and definitions of cure used to report on outcome of surgical interventions for SUI in NU patients. It is difficult to interpret and compare the outcomes of different therapies as investigators use different reporting systems of outcomes and different definitions of success or cure.

Concluding message

To the best of our knowledge, this is the first systematic review on this topic in this specific patient group. Our study gives a clear overview of all different outcome parameters and definitions of cure used to report on the outcome of surgical interventions for SUI in NU patients. The results of this systematic review will hopefully begin the dialogue to a future consensus on this topic.

Disclosures

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