

## Konservativno zdravljenje urinske inkontinence po radikalni prostatektomiji – pregled literature

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**Uvod:** Rak prostate je v razvitem svetu v porastu, zato je velik medicinski in ekonomski problem (1). Posledice zdravljenja raka prostate po večini prinašajo komplikacije, kot sta urinska inkontinenca in impotenca, ki posledično zmanjšata kakovost življenja posameznika (2). Prevalenca urinske inkontinence en mesec po radikalni prostatektomiji je visoka in se giblje med 6 in 87 odstotki (3). Konservativno zdravljenje naj bi bila metoda prvega izbora za zdravljenje urinske inkontinence po kirurškem posegu raka prostate (4). Namen raziskave je bil na podlagi domače in tuje strokovne in znanstvene literature predstaviti rezultate raziskav, katerih namen je bil ugotoviti učinkovitost konservativnega zdravljenja urinske inkontinence po radikalni prostatektomiji. **Metode:** Iskanje literature je potekalo po računalniških bazah PubMed, PubMed, Cinahl, Embase, Index Medicus in v registru študij Cochrane Library. Iskanje je bilo omejeno na besedila v angleškem in slovenskem jeziku in na časovno obdobje od leta 1994 do leta 2011. **Rezultati:** V pregled literature je bilo glede na vključitvene in izključitvene kriterije vključenih 17 randomiziranih kontroliranih raziskav. Raziskave so preučevale učinkovitost treninga mišic medeničnega dna, biološke povratne zveze, električne stimulacije in magnetne stimulacije na urinsko inkontinenco po radikalni prostatektomiji. Vse preučevane metode so se izkazale kot učinkovite za zdravljenje urinske inkontinence po prostatektomiji. Trening mišic medeničnega dna je v primerjavi z drugimi metodami dal statistično pomembno boljše rezultate. Dodatek biološke povratne zveze k treningu mišic medeničnega dna ni imel dodatnega učinka v primerjavi s samostojnim treningom mišic medeničnega dna. Podobno tudi dodajanje električne stimulacije k treningu mišic medeničnega dna ni dalo boljših rezultatov zdravljenja. Dokazi o učinkovitosti magnetne stimulacije so omejeni. **Zaključki:** Urinska inkontinenca pušča posledice na posameznikovi socialni in čustveni ravni. Konservativno zdravljenje je bolj učinkovito kot nezdravljenje pri izboljšanju urinske inkontinence po prostatektomiji. Vse štiri preučevane metode so se sicer izkazale kot učinkovite pri zdravljenju urinske inkontinence, vendar naj bi bil glede na izsledke raziskav trening mišic medeničnega dna prva metoda izbora. Biološka povratna zveza in električna stimulacija pa se priporočata predvsem za povečanje zavedanja mišic medeničnega dna in za učenje njihove zavestne kontrakcije. Magnetna stimulacija je nova obetavna metoda, potrebne pa so nadaljnje raziskave, ki bodo potrdile njeno učinkovitost.

**Ključne besede:** rak prostate, incidenca raka, trening mišic medeničnega dna, biološka povratna zveza, električna stimulacija.

## Conservative treatment of urinary incontinence after radical prostatectomy – literature review

**Background:** Prostate cancer is on the increase in developed countries, so that is why it is a major medical and economic problem (1). The consequences of radical prostatectomy are urinary incontinence and erectile dysfunction which affect the quality of life (2). Following radical prostatectomy, the prevalence of urinary incontinence at 1 month after surgery is high, ranging from 6% to 87% (3). Conservative treatment should be offered as first-line therapy to men with urinary incontinence after prostatectomy (4). **Purpose:** To review the literature on the effectiveness of conservative treatment for urinary incontinence after radical prostatectomy. **Methods:** A computer search on PubMed, Cinahl, Embase, Index Medicus and the Cochrane Central register of Controlled Trials Cochrane Library was carried out for randomized controlled trials published between 1994 and 2011. Searching for the literature was limited to English and Slovenian and the time period between 1994 and 2011. **Results:** Considering the inclusion and exclusion criteria, 17 randomized controlled trials have been included. Studies have examined the effectiveness of pelvic floor muscle training, biofeedback, electrical stimulation and magnetic stimulation to improve urinary incontinence after radical prostatectomy. All studied methods have proven to be effective. In comparison to other methods the pelvic floor training gave significantly better results. Adding biofeedback to pelvic floor muscle training had no additional effect compared to pelvic floor muscle training alone. Similarly, in studies comparing pelvic floor muscle training with pelvic floor muscle training combined with electrical stimulation no additional effect was demonstrated adding electrical stimulation. Evidence of the effectiveness of magnetic stimulation is limited. **Conclusions:** Urinary incontinence is an undeniable social problem, associated with impaired emotional and psychological well-being. Conservative treatment is more effective than no treatment in improving urinary incontinence after radical prostatectomy. All four studied methods have proven to be effective, however, according to the results of the studies, pelvic floor muscle training should be offered as first-line therapy to men with urinary incontinence after prostatectomy. Biofeedback and electrical stimulation are recommended as facilitation methods in order to stimulate awareness and obtain voluntary pelvic floor muscle contraction. Magnetic stimulation is a new promising method, but further research is needed to confirm its effectiveness.

**Key words:** prostate cancer, cancer incidence, pelvic floor muscles, biofeedback, electrical stimulation.

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