BLADDER TRAINING TO IMPROVE SYMPTOMS OF OVERACTIVE BLADDER: SYSTEMATIC REVIEW

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CAPES

Rocha A[1], Monteiro S[2], Alvear C[3], Palharini Volpato M[3], Campos I[1], Verleun D[2], Valim L[2], Riccetto C[3], Botelho S[1,3]

[1]Federal University of Alfenas - MG, Brazil. [2]Pontifical University of Minas Gerais - MG, Brazil. [3]State University of Campinas - SP, Brazil.

Unifal Universidade Federal de Alfenas — UroFisioterapia Laboratory — UNICAMP

Introduction

Bladder training (BT) is characterized by a programmed voiding regimen with gradually adjusted voiding intervals and is commonly used in the conservative treatment of individuals with overactive bladder (OAB).

Aim: Investigating the literature about the effectiveness of BT treatment alone and/or in combination with other therapeutic strategies can promote improvement in OAB symptoms, quality of life and report adverse events.

Methods and Materials

The systematic review was performed in eight databases, including PubMed, PEDro, SciELO, LILACS, Cochrane Library, Web of Science, EMBASE, and CINAHL. After selecting the titles, abstracts and full texts retrieved. To assess the risk of bias of the studies the Cochrane RoB 2 tool was used and the GRADE system was used to assess the quality of evidence of the studies analyzed. The protocol for this study is available in the PROSPERO systematic review protocol registry database under the registration number (PROSPERO CRD42022301522).

Figure 1 - Flow chart of studies selection process in accordance with PRISMA guidelines

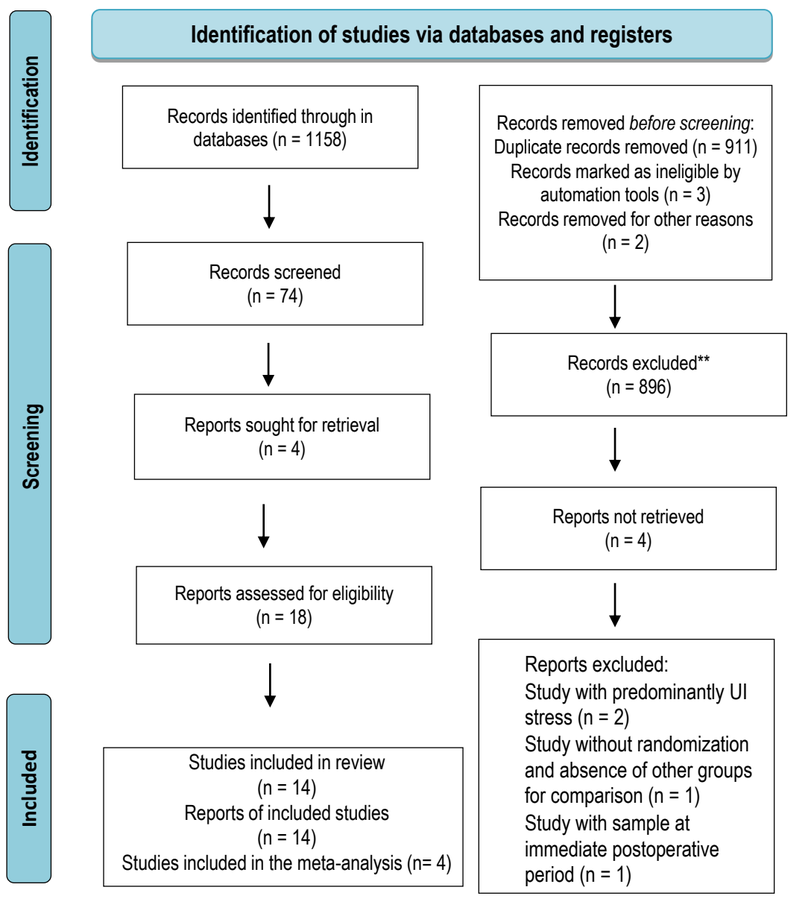
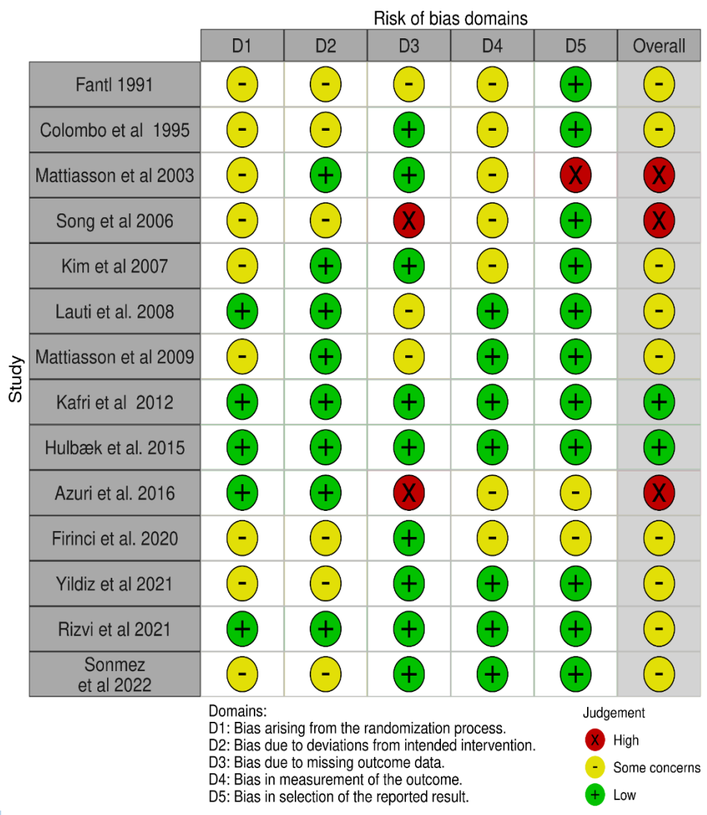


Figure 2. Risk of bias of included studies



Results

The search yielded a total of fourteen randomized controlled trials (RCTs) included in the review.

The total number of participants was 2.319 from 9 countries. The minimum age of the sample was 18 and the maximum age was 80 years.

RCTs featured:

BT isolated (n=12),
BT + intravaginal electrical stimulation (IVES) (n=2),
BT + DT (drug treatment) (n=5),
DT (n=7),
DT + Biofeedback (BF) + IVES (n=1),
PFMT + BF (n=1),
BT + PFMT + behavioral education/therapy (n=2),
BT + PTNS (percutaneous tibial nerve stimulation) or BT + TTNS (transcutaneous tibial nerve stimulation) (n=1).

Meta-analyses

BT combined with IVES in the short-term follow-up period promoted improvement in nocturia (DM: 0.89, 95% CI: 0.59-1.20), urinary incontinence (DM: 1.93, 95% CI:1.32-2.55) and quality of life (DM: 4.87, 95% CI: 2.24-7.50).

Three RCTs were considered with "high" risk of bias, nine studies with "some concerns" and two with "low" risk of bias.

To the GRADE system, the RCTs showed "very low", "low" and "moderate" certainty of evidence.

Discussion

The methodological quality of the studies was the best possible for the moment analyzed aspects of the currently available RCTs to update the current literature, most of the data in this review comes from moderate sized RCTs of very low to moderate methodological quality, verified by *GRADE*.

The findings of this study, corroborated with the recommendations of the societies guiding conservative treatment for OAB.

BT should be offered in combination with IVES, as a supplementary therapy in conservative treatment to increase treatment efficacy in the short-term follow-up period.

Conclusions

BT combined with IVES showed favorable results for the treatment of BT in the short-term follow-up period. Thus, the use of BT combined with IVES is recommended for the treatment of individuals with OAB.

References

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