

THE EFFECTS OF ANTICHOLINERGIC DRUGS ON HEALTH-RELATED QUALITY OF LIFE IN ADULTS WITH OVERACTIVE BLADDER SYMPTOMS: A SYSTEMATIC REVIEW AND META-ANALYSIS.

Hypothesis / aims of study:

To compare the effects of different anticholinergic drugs on quality of life with placebo in adults with overactive bladder symptoms.

Study design, materials and methods

Literature search of MEDLINE, EMBASE, Cochrane incontinence specialised trials register, clinicaltrials.gov and IUGA/ICS conference abstract databases was performed from 1966 to Dec 2012. Randomised trials (RTs) comparing one anticholinergic drug with placebo in adults with overactive bladder symptoms or detrusor overactivity assessing quality of life (QoL) were included. Trials comparing one anticholinergic versus another without a placebo arm were excluded. HRQL from included trials were extracted independently by two authors and analysed using Rev-Man 5.

Results

Twenty three RCT's comparing anticholinergics with placebo, assessed QoL of which 11 reported useable data for the meta-analysis. The most commonly used questionnaire was the King's Health Questionnaire (KHQ) in 18 RTs. The other instruments used were Incontinence Impact Questionnaire (IIQ) in two RTs, CONTILIFE in one RT, Overactive bladder questionnaire (OAB-q) in one RT and Giessen Complaint survey in one RT. Results from meta-analyses of placebo-controlled trials showed statistically significantly better QoL in favour of anticholinergic therapy. Differences in HRQL as assessed using KHQ showed clinically significant results in terms of reducing the incontinence impact score (WMD -6.89, 95% CI -8.73 to -5.05), symptom severity (WMD -2.03, 95% CI -3.18 to -0.89), role limitation (WMD -8.23, 95% CI -9.95 to -6.51), physical (WMD -8.45, 95% CI -10.3 to -6.58) and social limitation (WMD -4.56, 95% CI -6.19 to -2.92), improving personal relationships (WMD -2.92, 95% CI -5.08 to -0.76), emotions (WMD -6.03, 95% CI -8.48 to -3.58), sleep and energy (WMD -5.36, 95% CI -6.80 to -3.91) and coping measures (WMD -6.16, 95% CI -8.16 to -4.16). The meta-analysis showed no statistically significant difference in the general health perception.

The total HRQL assessed using OAB-q questionnaire (one RT) showed significantly better QoL in those using anticholinergics compared with placebo. One trial which assessed QoL using CONTILIFE showed better QoL with anticholinergics although there was no statistically significant difference.

Interpretation of results:

This meta-analysis showed a statistically significantly better QoL in favour of anticholinergic therapy when compared to placebo. There was a significant improvement in all the domains of KHQ with anticholinergics compared to placebo, apart from the general health perception domain. Similarly there was a significant difference in favour of anticholinergics compared to placebo in the QoL assessed using the OAB-q.

Concluding message:

The use of anticholinergic agents has shown statistically significant improvement in health-related quality of life in adults with overactive bladder symptoms compared to placebo.

Fig1: Incontinence Impact

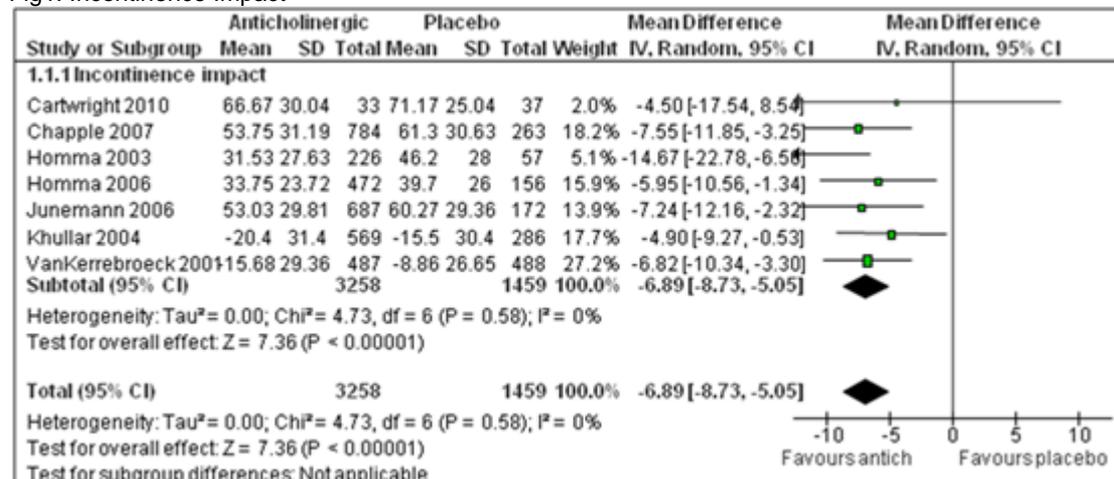


Fig 2: Coping measures

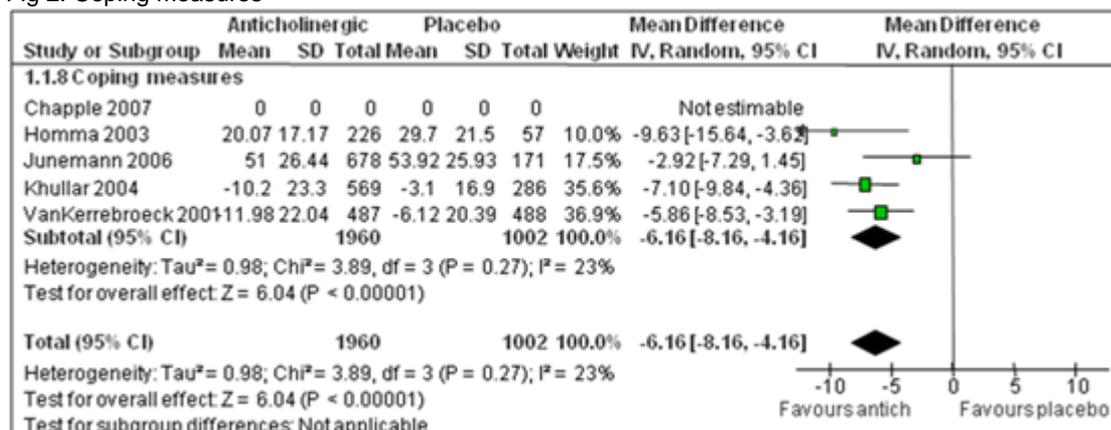
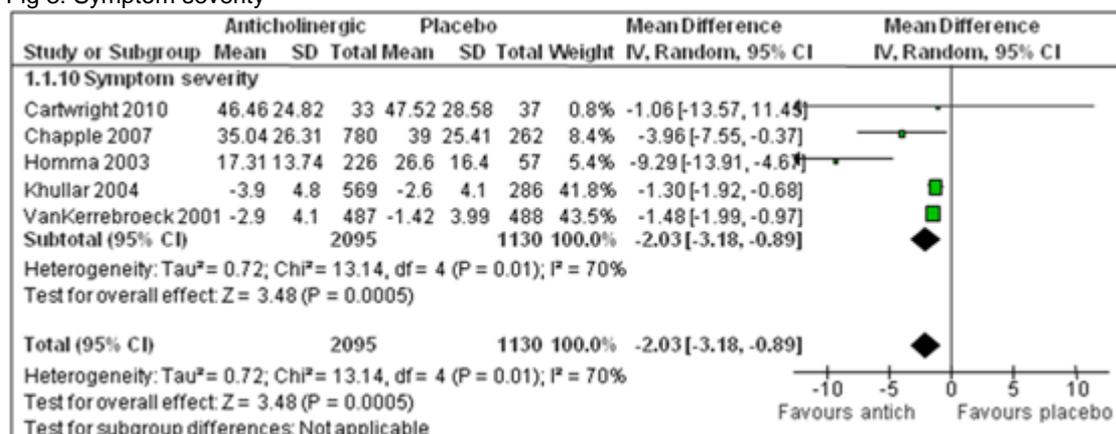


Fig 3: Symptom severity



Disclosures

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