Gynecomastia: a systematic review

Abstract
Master thesis, Programme in Medicine

Title: Gynecomastia: a systematic review

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Background: Gynecomastia is a common medical problem affecting nearly a third of the male population, in some cases with negative effect on quality of life.

Objective: To assess the quality of evidence and to describe the different treatments, both pharmacological and surgical, and quality of life in patients treated for gynecomastia.

Method: A systematic review of the literature in PubMed, Medline, Scopus, The Cochrane Library and SveMed+ in accordance with the PRISMA statement. Methodological quality was graded according to MINORS. Quality of evidence was rated according to GRADE. PICOS was used to specify inclusion criteria.

Results: Pharmacological treatment with antiestrogens appears to be a safe and effective method for treating pubertal gynecomastia. Several different surgical approaches have been reported with good aesthetic results and few complications.

Discussion and conclusions: This systematic review has identified 14 studies regarding treatment for gynecomastia, and three regarding QoL. All studies were non-randomized with a high risk of bias and very low levels of evidence. Pubertal gynecomastia can safely be managed by pharmacological antiestrogen treatment. Traditional surgical excision of glandular tissue combined with liposuction provide most consistent results and a low rate of complications. There is a need for future study designs with larger populations, control groups and using validated measurements to evaluate outcomes. There is also a need for consensus on classification and diagnosis of gynecomastia so that comparisons between studies can be made.

Keywords: Gynecomastia, pharmacology, surgery, treatment and quality of life (QoL).