

CARDIOVASCULAR OUTCOMES IN LONG-TERM TESTOSTERONE REPLACEMENT THERAPY AMONG MEN WITH LATE-ONSET HYPOGONADISM AND FUNCTIONAL HYPOGONADISM. A SYSTEMATIC REVIEW.

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ABSTRACT

INTRODUCTION

There is a worldwide increase in the prescription and use of Testosterone replacement therapy (TRT) in managing cases of hypogonadism with the dearth of evidence on long-term cardiovascular safety on the use of TRT in men with Late-Onset and functional hypogonadism. This systematic review seeks to establish whether long-term use of TRT is safe.

METHODS

An extensive systematic review was done using the preferred reporting items for systematic reviews and meta-analysis (PRISMA 2020) set of standard checklists. Six databases which are Embase, Wiley Library, Scopus, Pubmed, Google Scholar and Cochrane Database of Systematic Reviews were the sites used for the journal retrieval. Distiller-SR software program was employed to screen the journal titles and abstracts, remove journal duplicates, and data extraction for the articles that met the eligibility criteria.

RESULTS

Twenty-three publications (10 RCTs and 13 cohort studies) that met the eligibility criteria were included in the review with a total of 102,139 participants involved. Only seven of the included Journal articles reported Major Adverse Cardiovascular Events (MACE), which is a composite of nonfatal stroke, nonfatal myocardial infarction and cardiovascular death as part of their outcome measures but many had measures on cardiovascular risk factors benefits and/or adverse effects.

CONCLUSION

Long-term use of TRT seems to have some cardiovascular benefits in men with LOH and FH when safe practices are followed. Testosterone therapy should be used with caution in hypogonadal men with underlying or established cardiovascular disease.