INPLASY

Effects of orlistat on body mass index and serum lipids in obese adolescents

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ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 August 2024 and was last updated on 10 August 2024.

INTRODUCTION

*R*eview question / Objective We performed a meta-analysis to compare the effects of orlistat on body mass index and serum lipids in obese adolescents.

Condition being studied The outcome measures body mass index(BMI) and serum lipids, such as total cholesterol(TC), total triglycerides(TG), low density lipoprotein(LDL) and high density-lipoprotein(HDL).

METHODS

Participant or population Adolescents.

Intervention Orlistat.

Comparator Placebo.

Study designs to be included The search strategy was RCTs.

Eligibility criteria (1) Overweight/obese boys and girls under 18 years of age; (2) patients who are using orlistat or palcebo. (3) Outcome measures: body mass index(BMI) and serum lipids, such as total cholesterol(TC), total triglycerides(TG), low density lipoprotein(LDL) and high density-lipoprotein(HDL).

Information sources A comprehensive manual search of the PubMed, Embase and Cochrane databases was conducted in order to select relevant randomised controlled trials. Should the necessity arise to obtain pertinent research data, the authors will be duly contacted.

Main outcome(s) Body mass index(BMI) and serum lipids, such as total cholesterol(TC), total triglycerides(TG), low density lipoprotein(LDL) and high densitylipoprotein(HDL).

Quality assessment / Risk of bias analysis We evaluated the methodological quality of the individual studies using the Cochrane risk of bias tool for RCTs.

Strategy of data synthesis The estimates are expressed as mean difference (MD) with a 95% confidence interval (CI).

Subgroup analysis None.

Sensitivity analysis We conducted sensitivity analyses to investigate the influence of a single study on the overall pooled estimate of each predefined outcome.

Language restriction None.

Country(ies) involved China.

Keywords orlistat; obese; adolescents.

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