Using Drugs to Treat Adolescent Obesity
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During a six month time frame, do drug treatment regimens reduce weight in obese adolescents, ages 12-18, compared to placebo regimens?

Background/Problem
- According to the CDC, in 2012, more than 1/3 of children and adolescents in the United States were overweight or obese.
- Children and adolescents who are overweight have increased risk for chronic adverse health conditions such as heart disease and diabetes mellitus type II, which will continue into adulthood.
- Childhood obesity is estimated to cost the United States $14 billion annually in direct health expenses.
- Currently, lifestyle modifications such as diet and exercise are the primary treatment regimens for obese children and adolescents.

Citation | Design/Method & Sample | Major Variables | Measurement | Findings | Appraisal: Worth to Practice (WTP) | Summary of Literature
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McGinn et al., 2014 | Systematic review and meta-analysis | ▶ ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ |
McGovern et al., 2008 | Systematic review and meta-analysis | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ |
Kelly et al., 2013 | RCT | ▶ ▶ ▶ ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ |
Seal & Brownie, 2010; Kavet & Sharma, 2010; Dansky, 2001; Reuberg & Goldman, 2010; Reuberg, 2012; Hopkins et al., 2011; Landers et al., 2011 | RCT | ▶ ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ | ▶ ▶ ▶ ▶ ▶ |

Summary of Literature
- The use of pharmacological therapy to treat adolescent obesity remains controversial due to unknown long term effects on growth and development and unknown long-term efficacy.
- Pharmacological therapy should only be considered in conjunction with lifestyle modifications such as diet, exercise, and behavior modification.
- Currently, orlistat is the only drug approved by the U.S. FDA for treatment of obese children, 12 years old and above.
- Due to inconsistency of results and unknown long term effects on growth and development, practice recommendations regarding pharmacological therapy cannot be established with confidence.

Limitations
- Limited discussion of sample demographics and ethnicities
- Limited discussion of gaps and biases
- Incomplete follow-up with participants
- Results ranging from no statistical significance to only moderate significance
- Only "B" and "C" quality articles
- More literature reviews than RCTs

Implications for Practice
- Current practice guidelines should continue at this time.
- Guidelines recommend an interdisciplinary team approach, including a dietitian, exercise specialist, behavioral counselor, and the primary care provider.
- The team should work collaboratively to promote a well-balanced diet, structured meals, healthy snacks, 1 hour of screen time (TV/computer), and at least 1 hour of physical activity per day.

Next Steps
- Future research regarding the long term effects of the drugs on growth and development is recommended.