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Efficacy of antidepressants in juvenile depression: meta-analysis

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Background

Safety of antidepressants in children and adolescents is being questioned and their efficacy in juvenile depression remains uncertain. Our aim was to assess antidepressant efficacy in juvenile depression.

Materials and methods

Systematic review and meta-analysis of randomised controlled trials (RCTs) comparing responses to antidepressants, overall and by type, vs. placebo in depressed juveniles.

Results

Thirty drug-placebo contrasts in RCTs lasting 8 weeks (median), involved 2979 subjects (456 person-years) of average age 13.5 years. Meta-analysis yielded a modest pooled drug/placebo response rate ratio (RR=1.22, 95%CI: 1.15-1.31), with little separation among antidepressant-types. Findings were similar for rate differences (RD) and Corresponding number-needed-to-treat (overall NNT: 10; TCAs [13] > SRIs [9] > Others [8]). NNTs decreased with increasing age: children (22) > mixed-ages (11) > adolescents (8).

Conclusions

Antidepressants of all types showed limited efficacy in juvenile depression, but fluoxetine might be more effective, especially in adolescents. Studies in children, severely depressed, hospitalised or suicidal juveniles are needed, and effective, safe, and readily accessible treatments for juvenile depression are urgently required.

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