This is a very elegant study in an understudied population and age group that significantly advances the field using state-of-the-art methodology and with conclusions drawing appropriately from the data. The manuscript is very well written. Comments/suggestions that might be considered are listed below.

1. In the abstract under Methods, it might be better to state 17 patients with MDD rather than depressed subjects since depressive symptoms can be associated with conditions other than MDD. Specifying the age range in the abstract might also be helpful for the reader.

2. In the results, I would suggest spelling out the term ANCOVA (analysis of covariance) before its first use (I would also spell this out before its first use in the Methods/Data Analysis section of the manuscript.

3. In the background, the authors might reference the recent report by MacMillan and colleagues (Journal of Child and Adolescent Psychopharmacology 2003; 13(1): 63-71) which reported increased amygdala: hippocampal volumes associated with severity of anxiety but not severity of depression in treatment-naive pediatric patients with MDD compared to controls. There were trends for reduced hippocampal volumes and increased amygdala volumes and consistent with the authors report, the findings appeared larger on the left than the right. That study used formal instrument to measure severity of anxiety (as well as CDRS-R for depression) and also consisted of several patients with comorbid anxiety. Likewise, I would also suggest citing the work of Frodl and colleagues (Am J Psychiatry 159: 159: 1112-118, 2002). This article describes decreased hippocampal volume in young adult patients with a first episode of MDD. They also found increased amygdala volume in patients with first episode of MDD (Frodl et al 2002: Biol Psychiatry 51:708-714) and larger amygdala volumes in first depressive episode as compared to recurrent MDD and healthy controls (Frodl et al 2003: Biol Psychiatry 53: 338-344). These reports also did not find correlation with severity of MDD (did not report on severity of anxiety). These results can bolster the authors findings and in discussion could add information on importance of assessing for comorbidity, measurement of comorbid symptoms and how there are converging data but some of differences in studies could be accounted for by these issues.

4. The authors could consider in discussion adding comment about potential
developmental issues in terms of correlation with duration of illness, time points, recurrence, # of episodes, etc.

5. The authors are to be commended for their analysis of treatment-naive patients including and excluding the 3 MDD patients on medication. This illustrates the comprehensive and sophisticated analysis of results. One question is whether the child on methylphenidate had ADD/ADHD?

6. Volumes in the amygdala would be of interest. If this is readily accessible perhaps the authors could present this data. If not, in the discussion describing this as a future area of interest, e.g, studying this and other regions of interest.

7. Were there any trends in the familial vs nonfamilial patients. Recognize the sample size precludes definitive discussion but some mention of trends (or lack thereof) could be considered.

**What next?:** Accept after discretionary revisions

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

None