Reviewer's report

Title: Multidisciplinary care of obese children and adolescents for one year reduces ectopic fat content in liver and skeletal muscle

Version: 2 Date: 19 April 2015

Reviewer: Bart G Koot

Reviewer's report:

Major: comments
none

Minor comments

Abstract
Line 33 ‘attempted to elucidate’ Better state ‘evaluated’ Add at the end of this line that factors associated with change in these parameters were also evaluated

Line 54 consider removing: ‘as assessed by magnetic resonance spectroscopy measures’. It is redundant

Background:
No comments

Methods
Line 102-105: Specify whether other liver diseases were excluded. If not shortly address this in the discussion section

Line 113 Supply some more detail on your program in the text. As the reference to Holm et.al. is not freely accessible : How were children referred, which heath care professional saw the patient, approach used during consultations, outpatient setting?

Line 164 Specify ‘how analyze estimations of differences’ was performed, as this is not done using Wilcoxon signed rank test.

Line 166 Were all determinants tested individually? If so, it is more correct to refer to your analysis as ‘univariate linear regression’ (with adjustment for confounding for 5 covariables)

Line 166: Regression analysis correcting for 5 covariables makes your analysis prone to overfitting. Is it necessary to adjust for all the variables? i.e were these variables confounders/effect modifiers?

Results:
Line 178: Specify how many patients were eligible/treated in the inclusion period
in your center. A selection bias could be present as end of treatment measurement are part of the inclusion criteria.

Line 185. The interval between the scan and blood sampling is up to 60 days. Please also report the time between investigations and the start of the intervention.

Line 205-2010. It is unclear what this comparison adds. Consider removing.

Line 213 and 223: Change heading to this paragraph, as it does not clearly explain its content

Line 214-222 The summery given here is difficult to follow for readers. Consider removing all the non-significant p-values mentioned. Put the associated variables in a separate phrase

Line 214 versus 216: In line 214 LFC is not correlated, but in line 216 levels of liver fat are??

Line 224-231 again the summery is difficult to follow and line 224 and 226 are contradictory on the association with MFC

Line 216 versus line 227: How can change in LFC and change in MFC be associated one way but not inversely?

Line 235-242: what does this paragraph add? Consider removing

Discussion:

Line 224 is a 1% reduction in liver fat biologically important? Or merely statistically significant?

Line 281-289 Also discuss in this section the lack of association between gluc-insulin and LFC/MFC in this study. Discuss that it is remarkable that insulin and glucose did not improve in this study

Line 306 in this study LFC and VAT were not associated. So not all findings were in line with previous studies.

Line 311: ‘partly’ could be place between parenthesis in this phrase

Line 321-330: another limitation is that given the sample size and small change in LFC associations in regression analysis might have been missed.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests