**Supplementary File 3**

**Table S3.** Methodological appraisal of observational studies

| | Criteria | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | |
| **Studies** | Clear aim | Inclusion of consecutive patients | Prospective data collection | Endpoints appropriate to the aim | Unbiased assessment of the endpoint | Follow-up period appropriate (minimum 2 years) | Follow-up loss less than 5% | Prospective calculation of the study size | Adequate control group | Contemporary groups | Baseline equivalence of groups | Adequate statistical analysis | Total |
| John et al 2010 [1] | 2 | 2 | 1[a] | 2 | 2 | 2 | 0 | 0 | NA | NA | NA | NA | 11 |
| Grano et al 2010 [2] | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | NA | NA | NA | NA | 12 |
| Yang et al 2016 [3] | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 0 | NA | NA | NA | NA | 11 |
| Yeh et al 2014 [4] | 2 | 2 | 1[a] | 2 | 0[b] | 2 | 1 | 0 | NA | NA | NA | NA | 10 |
| Yamataka et al 2009 [5] | 2 | 2 | 2 | 2 | 2 | 1[c] | 1 | 0 | 2 | 0 | 1[d] | 2 | 17 |
| Granstrom et al 2013 [6] | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 0 | NA | NA | NA | NA | 12 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hukkinen et al 2014 [7] | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | NA | NA | NA | NA | 14 |
| Roorda et al 2018 [8] | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 0 | NA | NA | NA | NA | 11 |
| Levitt et al 2013 [9] | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 0 | NA | NA | NA | NA | 11 |
| Sood et al 2018 [10] | 2 | 1 | 2 | 2 | 2 | 0[e] | 0 | 0 | 2 | 1 | 0[f] | 2 | 14 |
| Khalil et al 2015 [11] | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | NA | NA | NA | NA | 12 |
| Meinds et al 2019 [12] | 2 | 2 | 2 | 2 | 0[g] | 0 | 1 | 0 | 2 | 1 | 2 | 2 | 16 |
| Mathias et al 2016 [13] | 2 | 1 | 1 | 2 | 0 | 1 | 1 | 0 | 2 | 1 | 2 | 2 | 15 |
| Lane et al 2016 [14] | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | NA | NA | NA | NA | 12 |
| Collins et al 2017 [15] | 2 | 1 | 2 | 2 | 0 | 2 | 2 | 0 | NA | NA | NA | NA | 11 |
| Aworanti et al 2012 [16] | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | NA | NA | NA | NA | 12 |
| Allin et al 2020 [17][h] | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | NA | NA | NA | NA | 12 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Espeso et al 2020 [18] | 2 | 1 | 2 | 2 | 0 | 1[i] | 0 | 1[j] | 1 | 2 | 1[k] | 2 | 15 |
| Saysoo et al 2020 [19][l] | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | NA | NA | NA | NA | 12 |
| Townley et al 2020[20] | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1[j] | 2 | 1 | 2 | 2 | 20 |
| Wong et al 2020[21] | 2 | 2 | 2 | 2 | 0[m] | 2 | 1 | 1 | 2 | 1 | 1[n] | 2 | 18 |
| Zhuansun et al 2020 [22] | 2 | 1[o] | 2 | 2 | 2 | 2 | 1 | 1[j] | NA | NA | 0 | 0 | 13 |

Note: Items 1 through 7 are for non-comparative, while 8 through 12 are for comparative studies.
[a]no REB approval stated or protocol but their procedure is detailed.
[b]The staff who reviewed the charts the same as those who conducted the telephone interviews.
[c] Only 6-month follow up done but not for 2 years.
[d]Similar proportion of male vs. female in control and experimental groups.
[e]Prospective cohort study, but no follow-up.
[f]No table differentiating demographic variables or other confounders.
[g]Blinding not mentioned.
[h]No proper comparison group. They examine affected length of bowel in the same cohort.
[i]Mention that children and parents were followed-up but no median or mean follow-up value.
[j]No sample size or power calculated but detailed and appropriate statistical methods.
[k]No stat. difference in age at surgery, sex, resected length, type of surgery between participants versus non-participants but no indication if this comparison was made between children vs teens, teens vs parents, or parents vs children.
[l]No comparator group. Just divided children into surgery types.
[m]All procedures were performed by the same team of surgeons but no mention of blinding for QoL questionnaire interview.
[n]No stat. difference in gender between cases vs controls but age is very different.
[o]Patients excluded to minimize bias but the bias is unexplained.

**Table S4**. Cochrane Risk of Bias table for Wang et al 2015

| Entry | Judgement | Support for judgement |
|---|---|---|
| Random sequence generation (selection bias) | Low Risk | "The patients were randomized to either control or intervention group (1:1) by using computer-generated random numbers." |
| Allocation concealment (selection bias) | Low Risk | "The results of the randomization were not revealed until the beginning of treatment and the group assignment was not known by the investigators who evaluated the outcome of the treatments and the nursing program." |
| Blinding of participants and personnel (performance bias) | Low Risk | "The results of the randomization were not revealed until the beginning of treatment and the group assignment was not known by the investigators who evaluated the outcome of the treatments and the nursing program." |
| Blinding of outcome assessment (detection bias) (patient-reported outcomes) | Unclear Risk | Comment: Investigators did not know the group assignment. However, it is unclear if patients did know their assignment. |
| Incomplete outcome data (attrition bias) | Low Risk | Comment: Intervention (n=43) and control group (n=42) were similar in sample size. All patients were followed up for 6-12 months' time. Same list of outcomes were assessed for both intervention and control groups. |
| Selective reporting (reporting bias) | High Risk | Comment: Outcomes such as social activities were mentioned in discussion column but not pre-specified. Parental satisfaction was pre-specified however patient emotional satisfaction was not, but it was mentioned in the discussion.<br><br>"The results of this study showed that the post-operative quality of life in most cases was good, but some individuals did exhibit reduced social activities and different degrees of inferiority in peer interactions." |

**Threshold for converting the Cochrane Risk of Bias Tool to AHRQ Standards (Good, Fair, and Poor)**[1]

Fair Quality: Selective reporting (reporting bias) was not met as it yielded "High Risk". With selective reporting domain, various outcomes were not pre-specified, however were mentioned in the discussion. As well, one or more outcomes such as social activities and patient behaviour/emotion were reported briefly thus unable to be incorporated into a meta-analysis.

[1]Higgins JPT, Altman DG, Gøtzsche PC, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *BMJ*. 2011;343(7829):1-9. doi:10.1136/bmj.d5928