

NEURODEVELOPMENT OF GASTRO-INTESTINAL CONGENITAL MALFORMATIONS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction

- Gastrointestinal congenital malformations: esophageal atresia, gastroschisis, omphalocele, intestinal atresia, Hirschsprungs disease, anorectal malformations, short bowel syndrome
- Previous evidence: till 24m, 6/13 studies: CDH
- Various potential etiological pathways
- Aim: comprehensive overview of evidence

Methods

- Systematic Review according to PRISMA guidelines
- Search terms related to *types of malformations AND cognitive, motor, language AND childhood, adolescence*
- Random effects meta-analysis
- Outcomes: cognitive, motor and language development

Discussion

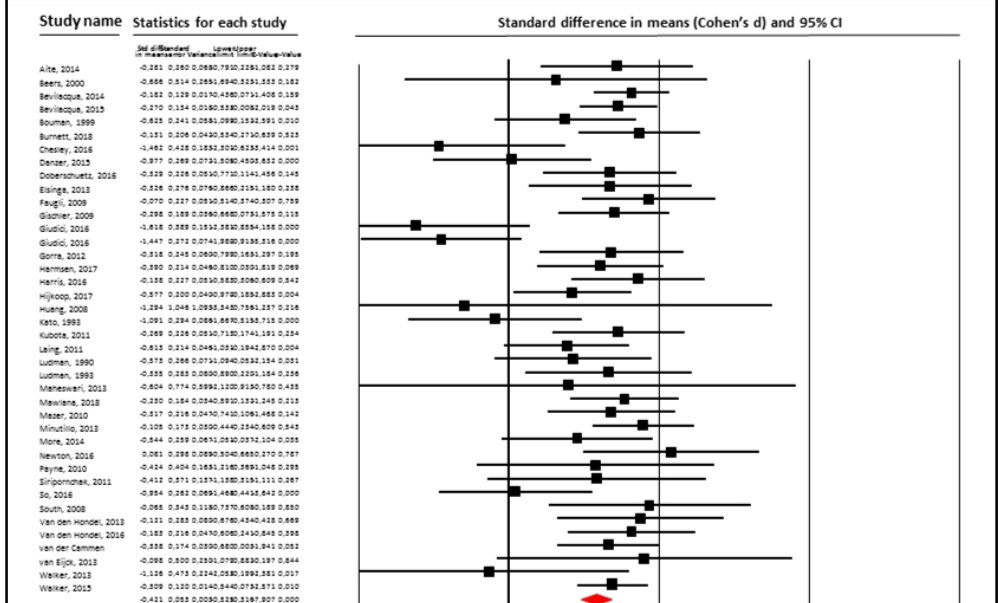
- There was evidence for small sized impairment of cognitive impairment, small to medium-sized motor impairment and medium-sized language impairment
- There were no significant differences in impairment between types of malformations, only short bowel patients showed more impairment
- Limitations: different potential etiological factors could not be tested for effect modification

Neurodevelopment of patients
with gastrointestinal congenital
malformations is **impaired**



Scan for abstract

Results



$d=-0.421$ (95%CI: -0.525 - -0.316) $p<0.001$
 $n=1839$ patients

