

Management of appendiceal mass and abscess in children; early appendectomy or initial non-operative treatment?

A systematic review and meta-analysis

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Appendicitis in the pediatric population

Two types:

Simple (70%)

Complex (30%)¹

Subtype: with appendiceal mass/abscess (+/-25%)

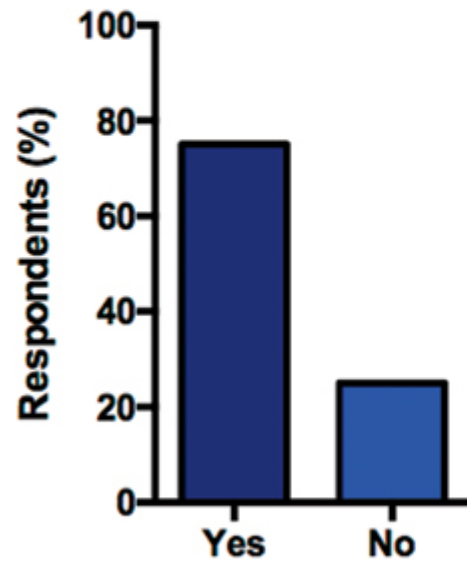
Controversy regarding optimal treatment strategy



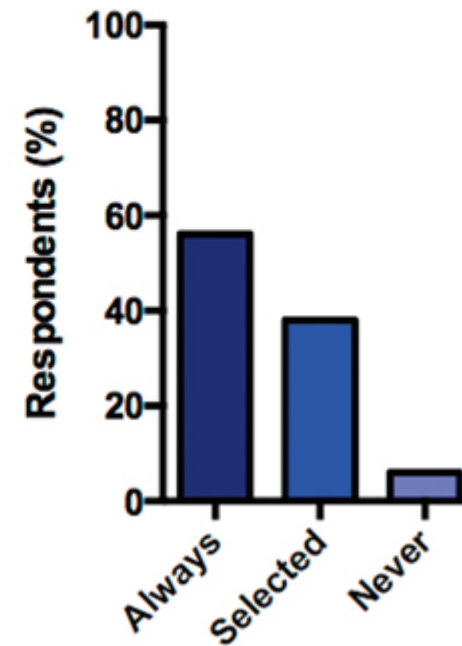


Appendix mass

A. Conservative management?



B. Interval appendectomy?





Aim of the study

To compare the overall complication rate between non-operative treatment and early appendectomy for children with an appendiceal mass/abscess



Methods

Systematic review (PRISMA)



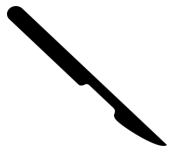
Children <18 years old with
appendiceal mass/abscess



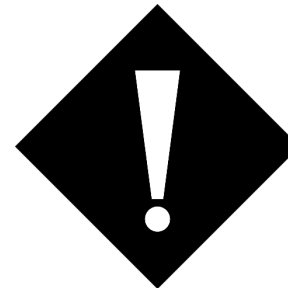
RCT
Cohort studies



Non operative
treatment (NOT)



Early appendectomy (EA)



Overall complication rate

Secondary:
length of stay, readmission rate



Included studies



RCT (N=1)

Prospective cohort (N=2)

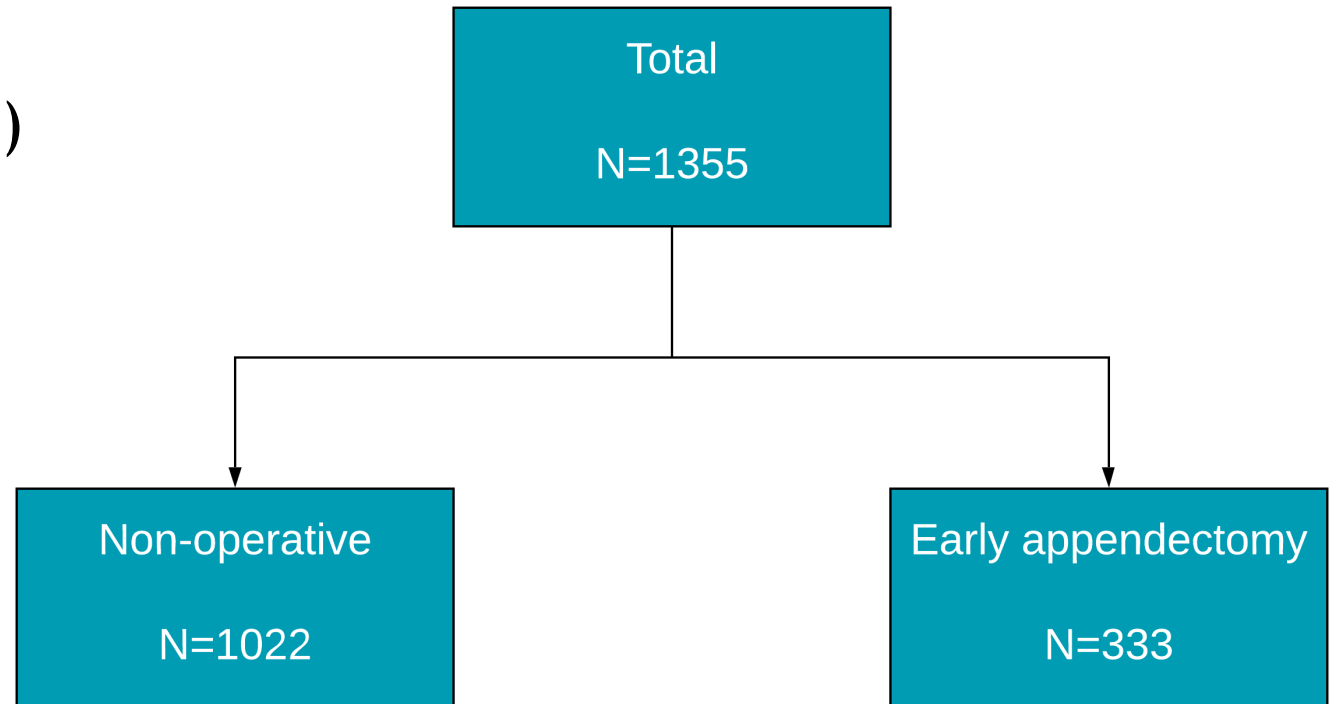
Retrospective cohort (N=11)



N=1355

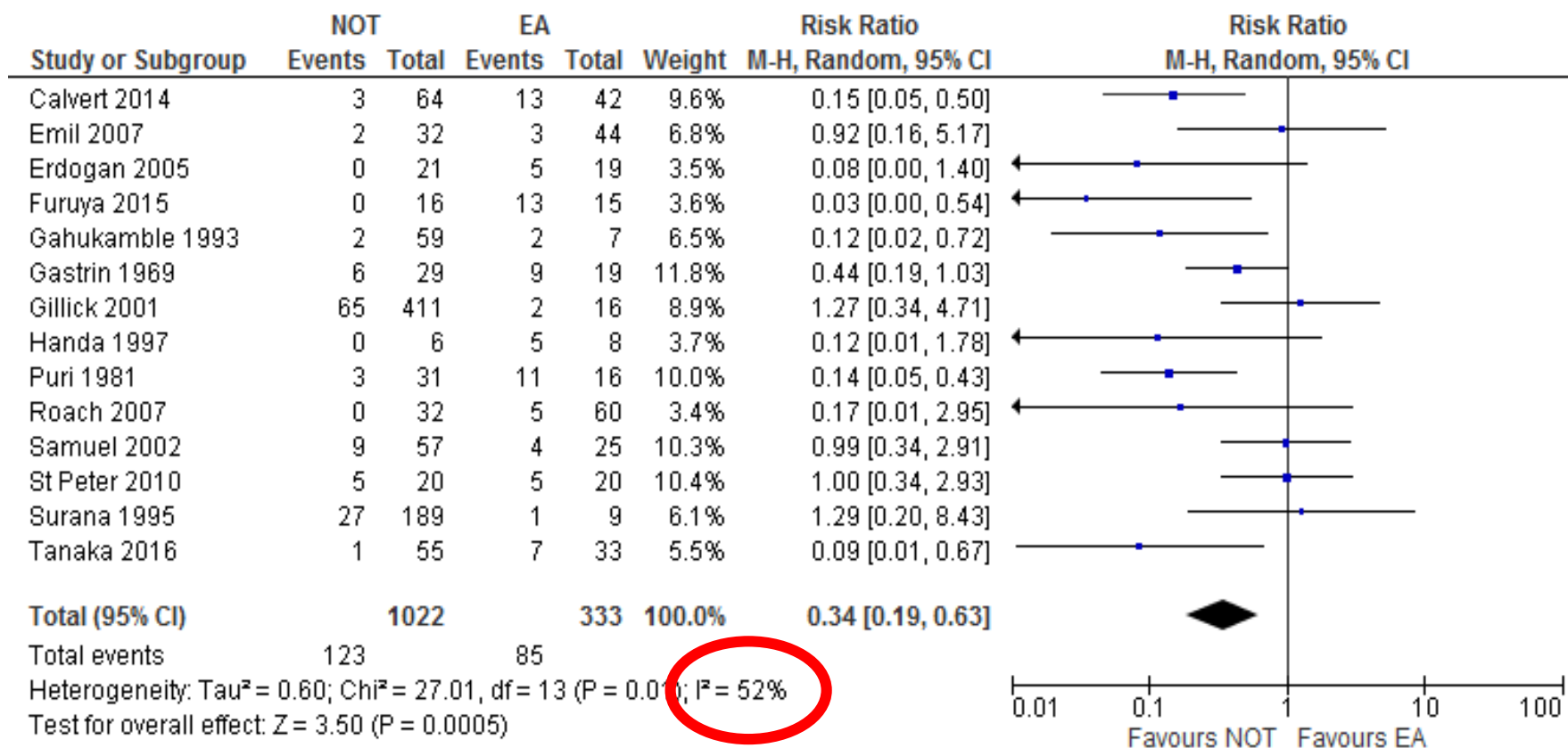
Risk of Bias

- Moderate (5 studies)
- Severe (9 studies)





Overall complication rate





Secondary outcomes

NOT:

Increased total length of stay (n=9)

2.92 [-0.15 - 5.99] days

Increased readmission rate (n=8)

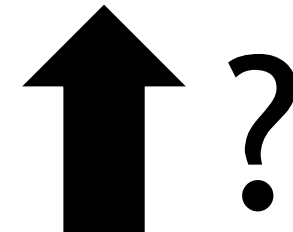
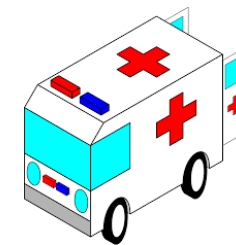
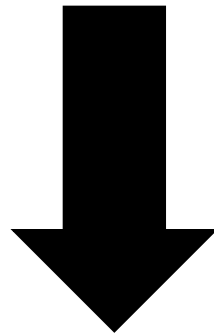
RR 1.75 [0.79 - 3.89]



Conclusion

1. High quality data is lacking

2. Non-operative treatment strategy for children with an appendiceal mass/abscess





Thank you for your attention

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