**Question** Are antibiotics as initial treatment appropriate for uncomplicated acute appendicitis in pediatric patients?

The aim of the study is to compare the safety and efficacy of antibiotic treatment vs appendectomy as the primary therapy for acute uncomplicated appendicitis in pediatric patients.

Outcome being studies:

* success rate of antibiotic treatment and appendectomy: resolution of symptoms without the need for surgery within 48 hours or recurrence of appendicitis within 1 month after treatment initiation.
* Complications
* Readmissions
* length of stay
* total cost
* disability days.

The meta analysis included 5 studies (1 RCT and 4 prospective clinical controlled trials) pediatric parinet between the age of 5-18 years with 404 participants.

**Findings**

* This meta-analysis suggests antibiotics as the initial treatment for pediatric patients with uncomplicated appendicitis may be feasible and effective without increasing the risk for complications.
* The risk for treatment failure increased significantly in patients with appendicolith.
* Appendectomy. Surgery is preferably suggested for uncomplicated appendicitis with appendicolith.

**Overall, The author suggests** Antibiotic treatment can be used as primary treatment in pediatric patients presenting with acute uncomplicated appendicitis without appendicolith.

**Limitation**:One of the major limitations of this study is that only 1 RCT and 4 prospective cohort studies were included.