

Treatment of pediatric parapneumonic empyema (PPE) requires several weeks of antibiotic therapy that is typically completed in the outpatient setting. The route of outpatient therapy can be oral or intravenous (outpatient parenteral antibiotic therapy)” Stockmann et al (2015).

Abstract:

BACKGROUND: Treatment of pediatric parapneumonic empyema (PPE) requires several weeks of antibiotic therapy that is typically completed in the outpatient setting. The route of outpatient therapy can be oral or intravenous (outpatient parenteral antibiotic therapy). No studies have compared outcomes between oral therapy and OPAT for PPE.

ReTweet if useful... Oral versus outpatient antibiotic therapy for empyema
[@ivteam #ivteam](http://ctt.ec/E2zdq+)

Click To Tweet

METHODS: We identified children >18 years hospitalized from 2005 to 2014 at Primary Children’s Hospital with PPE and discharged with oral therapy or OPAT. The primary outcome was the percentage of children who experienced all-cause complications after discharge. Complications included those that were related to pneumonia (including treatment failure, defined as readmission with reaccumulation of pleural fluid or abscess requiring drainage) or antibiotic therapy (eg, allergy, line clot) resulting in either a hospital readmission or emergency department/urgent care visit. All-cause complications were compared between oral therapy and OPAT by using propensity score-weighted logistic regression.

RESULTS: A total of 391 children were hospitalized with PPE; 337 (86%) were discharged with OPAT; 35 (9%) children experienced an all-cause complication, including 5 with oral (9.3%) and 30 (8.9%) with OPAT. Pneumonia and treatment-related complications were comparable ($P = .25$ and $.78$, respectively). Two patients treated with OPAT (1%) experienced treatment failure. After adjustment using propensity score weighting, the frequency of complications was similar between groups (adjusted odds ratio 0.97, 95% confidence interval 0.23-4.65).

CONCLUSIONS: The frequency of complications was similar with oral therapy and OPAT for children with PPE. Oral antibiotics may be considered safe and effective for children with PPE who will be discharged to complete therapy in the outpatient setting.

Reference:

Stockmann, C., Ampofo, K., Pavia, A.T., Byington, C.L., Sheng, X., Greene, T.H., Korgenski, E.K. and Hersh, A.L. (2015) Comparative Effectiveness of Oral Versus Outpatient Parenteral Antibiotic Therapy for Empyema. Hospital Pediatrics. January 1st. .

Thank you to our partners for supporting IVTEAM