

Adverse events associated with weekly short course isoniazid and rifapentine therapy in pediatric patients with latent tuberculosis: a chart and literature review

Gabrielle Peck¹, Mary Staat¹, Felicia Scaggs Huang¹, Nadim Khalil¹, Catherine Boyce¹, Cara Kohrieser¹, and Elizabeth Schlaudecker¹

¹Cincinnati Children's Hospital Medical Center

February 23, 2021

Abstract

Background: Effective yet safe treatment of latent tuberculosis is important for preventing the spread of tuberculosis and the progression to active disease in pediatric patients. As of 2017, the short course combination regimen of weekly isoniazid and rifapentine (3HP) administered by directly observed therapy (DOT) has replaced 9 months of isoniazid as the standard of treatment for latent tuberculosis in pediatric patients. The literature, limited in size, has established the 3HP regimen's superior safety and adherence. **Methods:** We completed a retrospective chart review ($n = 22$) of pediatric patients at our institution receiving this regimen between 2017 and 2019. Frequencies of selected outcomes were compared to data collected in a literature review. **Results:** In this retrospective chart review, pediatric patients ages 2 to 20 years receiving 3HP with DOT for latent tuberculosis experienced higher adverse event rates, more severe adverse events, and higher treatment discontinuation than that which has been previously reported in the literature. A possible explanation for this finding is that our cohort's race/ethnicity differed from the cohorts used in the literature. **Conclusions:** Our data suggests that the short course combination regimen for pediatric latent tuberculosis patients may have a higher adverse event rate than previously established. Although this sample size is small, this study urges further investigation of more diverse cohorts to better establish the regimen's safety and tolerability.

Hosted file

Pediatric Pulmonary 3HP LTBI.pdf available at <https://authorea.com/users/397685/articles/510491-adverse-events-associated-with-weekly-short-course-isoniazid-and-rifapentine-therapy-in-pediatric-patients-with-latent-tuberculosis-a-chart-and-literature-review>

Hosted file

Table 1 3HP LTBI Pediatric Pulm.pdf available at <https://authorea.com/users/397685/articles/510491-adverse-events-associated-with-weekly-short-course-isoniazid-and-rifapentine-therapy-in-pediatric-patients-with-latent-tuberculosis-a-chart-and-literature-review>