TREATMENT COMPLIANCE OF PEDIATRIC LATENT TUBERCULOSIS INFECTION: AN EXPERIENCE OF A TERTIARY HOSPITAL IN JEONBUK PROVINCE, KOREA, 2014-2017

Jin Woong Doo¹, Nu Ri Hwang¹, Min Jeong Han¹, Sun Jin Lee¹, Ki Hwan Kim², Jae Kyun Hur², Dae Sun Jo¹

¹ Department of Pediatrics, Chonbuk National University Children's Hospital, Jeonju, Republic of Korea

² Department of Pediatrics, College of Medicine, Catholic University of Korea, Seoul, Republic of Korea

Background

According to the Korean Guidelines for Tuberculosis, a 9 month course of isoniazid (9H) or a 3 month course of isoniazid plus rifampin (3HR) is recommended for the patients of latent tuberculosis infection (LTBI). However, for childhood patients, it is hard to maintain medication for those period. We aimed this study to find what are the obstacles to good treatment compliance.

Methods

We reviewed the medical records of all confirmed pediatric latent tuberculosis cases in Chonbuk National University Children's Hospital, from January 2014 through December 2017. Visit dates, symptoms and signs possibly related to medication, and prescription details were mainly investigated.

Keywords

Latent tuberculosis,
Child,
Treatment compliance

Results

A total of 232 medical records of childhood LTBI cases were reviewed. Most children (N = 225) were on 9H. Seven adolescents completed 3HR and 3 of them mentioned orange colored urine. Sixteen children (6.9%), mostly infants and on 9H, showed refusal of medication in the early period of treatment but completed the course. Two infants had a few days of diarrhea but they could continue the medication. No cases in this study showed skin rash related to the medication. Twelve (5.2%) cases completed the medication behind the schedule due to delayed clinic visits. All pediatric LTBI cases in this study completed a course of either 9H or 3HR.

Conclusions

Adverse effects of childhood LTBI treatment were rare and tolerable. To complete the LTBI treatment course properly in children, reminding the visit schedules to caregivers are important. Providing reassurance to caregivers and easily administrable drug formula could improve the compliance for the LTBI treatment in children.

Latent Tuberculosis Medication Regimen

Adverse Effect Incidence in Pediatric Latent Tuberculosis Treatment

Adverse effects / problem	9H group (N = 225)	3HR group (N = 7)
Medication refusal	16	0
Diarrhea	2	0
Orange colored urine	0	3
Medication completion behind the schedule	10	2
Incomplete course of medication	0	0

3HR, 3 months of isoniazid plus rifampin; 9H, 9 months of isoniazid