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Background

The diagnosis of pulmonary tuberculosis (PTB) among children remains challenging due to the non-specific clinical symptoms, laboratory features and the difficulty of sampling for microbiological investigations. We aimed to study clinical, therapeutic and evolutionary features of PTB among children.

Methods

We conducted a retrospective study including all children aged ≤ 18 years diagnosed with PTB between 1995 and 2016.

Results

We encountered 67 children with PTB, among whom 37 (55.2%) were female. The median age was 15 years [1-18 years]. According to residence, 36 patients came from rural areas (53.7%). We noted 7 cases (10.4%) of miliary tuberculosis (TB). Three cases of pleural TB (4.5%), one case of lymph node TB (1.5%) and one case of neuromeningeal TB were associated to PTB. Induced sputum or gastric aspirate were positive for *Mycobacterium tuberculosis* in 67.9% of the cases. Serologic tests for human immunodeficiency virus were positive in one case (1.5%). The mean duration of antitubercular therapy was 8 \pm 2 months. The treatment regimen was based on a quadritherapy for the first 2 months, followed by a bi-therapy for the rest of the period. Fixed dose drug combinations were prescribed in 17 cases (25.3%). The disease evolution was favourable in 65 cases (97%). Two patients were dead (3%). There were no relapsing cases.

Conclusion

Prompt diagnosis and treatment of PTB among children improve the prognosis. Screening for PTB among children exposed to adult tuberculosis is crucial in order to prevent the disease.

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Methods

We conducted a retrospective study including all children aged ≤ 18 years diagnosed with PTB between 1995 and 2016.

Results

- **Total:** 67 children
- **Gender:** 37 females: 55.2%
- **Median age:** 15 years [1-18 years]. Children aged between 15 and 18 years were the most affected age group (Figure 1).

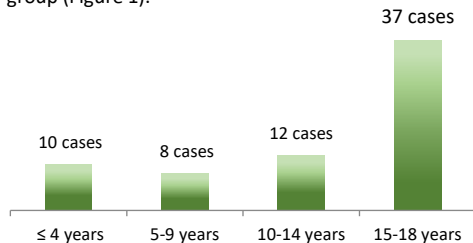


Figure 1: Age distribution of children with pulmonary tuberculosis

- **Urbanity of residence:** Rural area: 36 cases: 53.7%.
- Seven cases of miliary tuberculosis were noted: 10.4%

● Associated forms of extrapulmonary tuberculosis:

Pleural tuberculosis was associated with PTB in 4.5% of the cases (Table 1)

Table 1: Associated forms of extrapulmonary tuberculosis among children

	Number	Percentage (%)
Pleural TB	3	4.5
Lymph node TB	1	1.5
Neuromeningeal TB	1	1.5

TB: tuberculosis

- **Induced sputum or gastric aspirate:** positive for *Mycobacterium tuberculosis* in 67.9% of the cases.
- **Serologic tests for human immunodeficiency virus:** positive in one case: 1.5%.

● The mean duration of antitubercular therapy: 8 \pm 2 months.

● Treatment regimen:

- ▶ Quadritherapy for the first 2 months
- ▶ Bi-therapy for the rest of the period.

● Fixed dose drug combinations: 17 cases: 25.3%.

● Disease evolution: favourable in 97% of the cases (Figure 2).

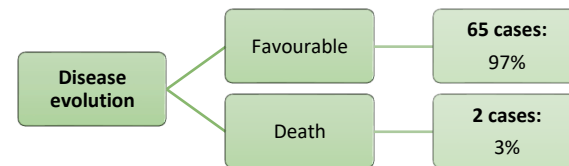


Figure 2: Disease evolution among children with pulmonary tuberculosis

- There were no relapsing cases.

Conclusion

Prompt diagnosis and treatment of PTB among children improve the prognosis. Screening for PTB among children exposed to adult tuberculosis is crucial in order to prevent the disease.