Cavitary Pulmonary Tuberculosis Mimicking Congenital Cystic Adenomatoid Malformation in an Infant

Cavitary lesions due to pulmonary tuberculosis are very rare in infants, although these may be found in older children and adolescents [1]. We report a six-month-old girl who presented with history of recurrent episodes of respiratory infections, failure to gain weight, rapid respiration and feeding difficulty since 3 months of age. Failure to thrive, respiratory distress, clubbing and decreased air entry in right infra mammary region with coarse crepitations were evident on clinical examination. Full Blood count revealed anemia and neutrophilic leucocytosis. Chest *X*-ray revealed a large cystic lesion in right middle and lower zone (***Fig.* 1**). With provisional diagnosis of Congenital cystic adenomatous malformation (CCAM)/congenital lobar emphysema (CLE) with consolidation/staphyolococcal pneumatocele, antibiotics and supportive treatment were initiated. On High resolution computerised tomography of thorax, CCAM/CLE were ruled out, and features of pneumatocele with endobronchial obstruction of bronchi with mucus plugs on right side were found. Bronchoscopy revealed granulation tissue in the bifurcation of right main bronchus, distal end of right middle lobe bronchus and right lower lobe bronchus. Mother had history of chronic cough and intermittent fever of 5 months duration for which she had received antibiotics and bronchodilators. Her chest *X*-ray revealed similar cavitary lesion in the lower zone of right lung. Acid-fast-bacilli were found in her sputum. Both infant and mother were put on anti-tuberculosis treatment, and on six month follow up child had gained 3 Kg weight. Her symptoms had disappeared with radiological clearance of lesion.

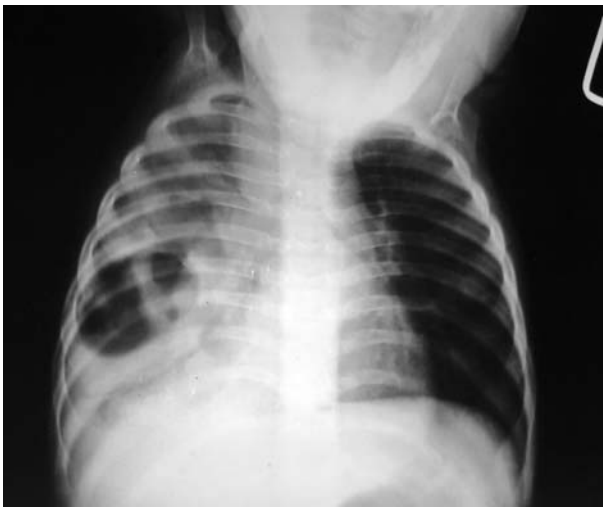

FIG. 1 *Chest X-ray showing cavitary lesion in right lower zone.*

We emphasize to consider tuberculosis in any infant presenting with chronic respiratory symptoms with failure to thrive. Cavitary lesion in lung is a rare presentation of tuberculosis in infants. Contact tracing is crucial in arriving at diagnosis for early treatment and good outcome.

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Massive Levothyroxine Ingestion

Two sisters, aged 3 and 1 years, were brought to the casualty with history of consumption of levothyroxine tablets. Their mother had hypothyroidism and was on levothyroxine. The mother found the two children playing with the levothyroxine bottle (75 mcg tablets). The exact number of tablets of levothyroxine ingested by each sibling was uncertain, but 50 tablets were reported to be missing. The elder sibling received gastric lavage with charcoal within 1 hour of ingestion and was referred to our center for further management. Since the physical examination at the time of reporting to our hospital was unremarkable, the danger signs were explained to the parents and they were advised close follow-up. The parents reported to the casualty on day 3 of ingestion, with complaints of increased precordial activity in the elder child. Child was afebrile, but had tachycardia (heart rate

TABLE I SERIAL THYROID FUNCTION TESTS AFTER LEVOTHYROXINE INGESTION

Hours since ingestion	*T3 (mg/dL for total, pg/mL for free)*	*T4 (mg/dL for total, pg/mL for free)*	*TSH (mIU/mL)*
51 hrs*	311.5 [Normal 100-260]	>30 [Normal 5.5-12.8]	0.11 [Normal 0.7-6.4]
93 hrs#	16.9 [Normal 3.5- 10.0]	1.9 [Normal 0.8- 2.2]	0.14
161 hrs#	6.08	3.23	0.02
28 days#	3.88	1.36	2.91

*T3= Triiodothyronine, T4= thyroxine and TSH= thyroid stimulating hormone. *Total, T_3 and T_4; # Free T_3 and T_4*

136/min). ECG showed sinus tachycardia. The total T_3 and T_4 levels were elevated: levels of thyroid stimulating hormone were low (***Table* I**). Child was started on propranolol 1 mg/kg/day. Tachycardia settled 7 days after propranolol was started and the drug was subsequently stopped. The serial fT3, fT4 and TSH levels are summarized in ***Table* I**. The younger sibling was symptom-free at presentation and on subsequent follow ups.

Children with levothyroxine overdose may have symptoms like fever, flushing, palpitations, increased sweating, tremors, irritability, increased bowel movements and convulsions. They may have tachycardia, hypertension and cardiac arrhythmias [1]. Levothyroxine overdose in children typically follows a benign course [2]. The onset of symptoms may be delayed up to 11 days after ingestion of a massive dose of levothyroxine ingestion, given the half life of levothyroxine of approximately 7 days [1]. Propranolol is used to reduce the symptoms. In severely symptomatic patients, steroids and propylthiouracil can be used [3]. In patients with significant cardiac or neurological symptoms, extractive techniques (charcoal hemoperfusion and/or plasmapheresis) have been used in the past [4, 5].

Levothyroxine is available in various colored tablets and has no noxious taste making it attractive to children. Adults who are on thyroid hormone supplements should always be cautioned to keep these tablets beyond the reach of children, so that unintentional thyroid poisoning can be avoided.

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Genetic Anticipation and Autism

We report on a boy who was brought to our Pediatric Early Intervention Clinic for evaluation of speech and language delay at 3 years of age. He was born by normal vaginal delivery at full term with birth weight, length and head circumference, 3.4 kgs (25th centile), 48 cm (9th centile) and 35 cm (25th centile), respectively. Physical and systemic examinations were normal with no dysmorphic features. Evaluation revealed delay in communication, fine motor and personal social skills. Hearing tests on two previous occasions were normal. He had tendency to repeat words (echolalia) and showed some stereotypic interests in his behaviour. Repeat psychological assessment after six months revealed deteriorating personal social skill with further decline in social interaction. A diagnosis of autistic spectrum disorder (DSM-IV–TR) was made. There was history of poor scholastic achievement in father in his young age but he did not have problems in communication or social interaction. Mother and grandparents had no such history.