MATERIAL AND METHODS
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The present study was carried out in the department of Radiology, M.L.B. Medical College, Jhansi (U.P.). Children upto 12 years of age who were either admitted for treatment in children wards or attended O.P.D. of Paediatrics and Well Baby Clinic were taken into account.

The positive cases of primary tuberculosis were taken in our study. Their diagnosis were based on detailed history, clinical examination, laboratory examination and radiological examination.

History of Contact:

Patient with positive history of contact from parents or from relative and from neighbours were taken into account.

The nutritional status of individual patients were studied as per Indian Academy of Paediatrics Classification (1972) of Malnutrition.

Normal 80% by weight of the 50th percentile of Hardward Standard.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
<th>Percentile</th>
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<tbody>
<tr>
<td>I</td>
<td>71</td>
<td>80%</td>
</tr>
<tr>
<td>II</td>
<td>61</td>
<td>70%</td>
</tr>
<tr>
<td>III</td>
<td>51</td>
<td>60%</td>
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<tr>
<td>IV</td>
<td>&lt;</td>
<td>50%</td>
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Besides this, cases were also studied as per the age group:

- **New born** - First 4 weeks after birth.
- **Infants** - First year.
- **Toddler** - 1-3 years.
- **Pre-school child** - 3-6 years.
- **School age child** - 6-10 years.
- **Adolescent** - 10-12 years.

Besides recording name, age, sex, address, socio-economic status, occupation of parents, birth order or child in the family and per capita income, following facts were recorded on each case on specially designed proforms.

From parents and other family members, detailed history was obtained regarding present illness in chronological order.

**PAST ILLNESS**:

A detailed past history of pertussis, measles, malaria, worm infestation etc. were noted.

**FAMILY HISTORY**:

An enquiry was made about a definite history of tuberculosis in parents, siblings, near relatives,
neighbours and other care takers. For example, chronic cough, haemoptysis, prolong fever, dyspnoea, weight loss, in suspected cases of family members were sent to T.B. Clinics for diagnosis and treatment of tuberculosis.

**CLINICAL EXAMINATION:**

A thorough clinical examination was done including general appearance, pallor, anaemia, cyanosis, clubbing, oedema, fascial look, hair changes, skin condition, body weight, various vitamin deficiency state.

- Presence or absence of fever, cough, excessive sweating.
- Headache, vomiting, convulsions.
- Loss of weight, change in behaviour.
- Loss of appetite.
- Diarrhoea, constipation, pain in abdomen.
- Lymphadenopathy - cervical, axillary, inguinal or abdominal.
- Ascitis.
- Hepatosplenomegaly.
- Pulmonary findings.
- Sign of central nervous system involvement.
INVESTIGATION:

The children of study group were subjected to some or all of the following laboratory investigations:

Blood

(a) Haemoglobin estimation (Sahli's Haemoglobinometer).

(b) Total and differential white blood cell count (Thomaseiss instrument).

(c) Estimation of Erythrocyte sedimentation rate (Wintrobe's method).

X-ray chest

Routine examination of chest, P.A. Projection or A.P. Projection were done. In certain instance, lateral decubitus and laredotic projection view were also taken.

Mantoux test

Inject 0.1 ml. of PPD taking all aseptic precautions. The volar aspect of right fore-arm was chosen as site for Mantoux test.

The test was read after 72 hours of injection. Transverse and vertical diameter were measured.
Induration \(\geq 10\) mm. after 72 hours was considered as Mantoux test positive.

The basic materials used in our study are:

1. Children attending Paediatric O.P.D. and indoor upto age of 12 years.
2. X-ray machines and accessories.
3. X-ray films and cassettes.
4. Fixer and developer.
5. Viewing boxes.
6. Tuberculin test (Mantoux).