

OUR PRIZE COMPETITION.

WHAT ARE THE CHIEF CAUSES OF RICKETS?
WHAT ARE ITS PROMINENT SYMPTOMS, AND
HOW CAN A DISTRICT NURSE AID IN ITS
PREVENTION?

We have pleasure in awarding the prize this week to Miss A. Hellard, Richmond Terrace, Brighton.

PRIZE PAPER.

The chief causes of rickets in children are defective hygienic conditions, especially in the matter of food and fresh air.

The natural food of the infant for the first nine months of its life is the mother's milk; this may be deficient in quantity or quality, either through ill-health or malnutrition of the mother. The greater number of cases of rickets occur in artificially fed infants, where there has been a deficiency of natural salts and fat, or where there has been an excess of starchy food which cannot be digested.

Overcrowding in close, ill-ventilated rooms and confinement to the house tend to produce rickets.

SYMPTOMS.

The child becomes restless, especially at night, throwing off bedclothes and lying with arms flung out.

There is profuse sweating about the head and neck whilst asleep.

Tenderness about the limbs, especially at the joints. Changes in the bones; the epiphyses of the long bones become thickened; this is especially noticed at the wrists, ankles, and knees, also at the junction of ribs with the costal cartilage.

The defects of ossification are also found in the skull, where the fontanelles are large, and may not close until long after the usual time.

As well as the enlargement at the ends of the bones, they are found to be soft, in consequence of which they yield to the traction of the muscles and weight of the body, and become bent, so forming deformities, such as bow legs and contracted pelvis; the head acquires a broad square shape, contrasting with the small face and features; the bones are more fragile than usual, and green-stick fractures often occur.

The teeth are late in appearance; sometimes the first teeth do not come until eleven or twelve months.

PREVENTIVE TREATMENT.

The district nurse has a wide scope in helping to prevent rickets in infants.

1. By instructing the nursing mother as to her own diet and hygiene during lactation, and

also as to the value of fresh air in living and sleeping rooms, and the necessity of the child living in the open air as much as possible.

2. The child must on no account be allowed to sleep in bed with other people, but must sleep in a cot or cradle, which can, if necessary, be improvised from a box, basket, or even a drawer removed from a chest; this must be fitted with a pillow and blankets. The pillow can be stuffed with chaff, which makes a soft bed, and can be emptied and freshly filled often.

3. In the case of artificial feeding the ideal is fresh cow's milk diluted with barley water, and with the addition of lime water, cream, and lactose, but as this is rarely to be obtained in poor districts, the next best thing is a good condensed milk, with the addition of lime water and olive oil to supply the necessary mineral salts and fat; at the age of eight to twelve months raw meat juice, beef tea, and mutton broth may be given, and small doses of cod liver oil or emulsion are good. At one year the lightly boiled yolk of egg may be given, and orange juice if obtainable.

HONOURABLE MENTION.

The following competitors receive honourable mention:—Miss Dorothy M. Clarke, Miss Lena M. Innes, Miss Martha Blanchard, Miss Catherine Wright, and Mrs. Farthing.

Miss Lena M. Innes writes:—Prominent symptoms often occurring at the age of six months and later are:—

1. Excessive perspiration (most marked at night).
2. Square shape of head (not so noticeable in a baby as child of two years or over, and due to the fontanelle not having closed).
3. Flabby condition of limbs.
4. Enlarged abdomen.
5. Objection to weight of bedclothes, owing to tenderness of bones.
6. Delayed teething.
7. "Rickety Rosary" (when ribs become "beaded," as it were, and produce pigeon breast).

Nervous symptoms are:—

1. Convulsions (which, occurring in an apparently healthy child of ten months or so, would at once suggest abnormality).
2. Laryngismus stridulus (very grave symptom, which is often the cause of death).
3. Facial irritability.
4. Tetany (when thumbs become turned inwards to palms).

QUESTION FOR NEXT WEEK.

How does puerperal septicæmia arise? Describe the course and management of the disease.

[previous page](#)

[next page](#)