

ASTHMA, ITS CAUSE AND TREATMENT.

By MISS L. GODDARD, S.R.N.

Asthma is a complaint characterised by periodical paroxysmal attacks of dyspnoea which may or may not be accompanied by bronchitis. The spasm may occur at any hour, but in most cases it awakens the patient in the night, increasing in its intensity, and may last for anything from a few minutes to several days.

Due to spasmodic contraction of the bronchi causing emphysematous changes in the lung, there is difficulty in expiration, which becomes more difficult and is accompanied by a wheezing and a sense of tightness in the chest. As the attack increases the patient's distress may be extreme, the eyes become prominent, the face cyanosed, the extremities become cold and blue owing to the oxygenation of the blood becoming imperfectly performed, and due to the violent muscular efforts at respiration. Sweat breaks out and is profuse, the patient grasps some support such as the rail of the bed in order to bring into use the muscles at the back of the neck attached to the ribs, which act as extraordinary muscles of respiration.

During the laboured attempts at breathing all the necessary muscles of respiration are used, the chest enlarges, expiration is prolonged, though little air enters the lung and within it there is almost perfect stagnation. The patient then begins to cough and expectorates a small rough tough lump or lumps similar in shape to a small branch of the bronchioles, after which the patient resumes his normal colour and, almost exhausted, will eventually fall asleep until the next paroxysm.

Asthma is more common in males than females, and bad as the case may seem it is rarely fatal, but it does give the utmost alarm to the patient. It generally appears at first after some inflammatory condition of the respiratory mucous membrane, or it may be accompanied by structural changes in the bronchi due to a nervous origin and the term nervous or spasmodic asthma is applied.

Or it may be caused by reflex due to irritation to the skin owing to abnormal sensitivity to some substance outside the body; by irritation of the nose or tonsils, such as some animals, feathers, wool, pollen, dust, hair, climate and bacteria; also drugs, such as aspirin.

Or, again, it may be due to irritation in the stomach, usually of a protein nature, such as eggs, fish or shell fish.

Asthmatic attacks sometimes occur in some forms of heart disease known as cardiac asthma.

Anxiety, too, fright or emotion, and certain odours may induce an attack; also obstruction of the nasal passages, such as polypi or adenoids, and in some cases when kidney disease such as Bright's disease is present, when the affection is known as renal asthma.

Asthma is often hereditary.

The remedies are numerous and chiefly consist of paying attention to the diet, tonics, and the removal of the source of irritation, and in anti-spasmodics either taken internally or by inhalations and breathing exercises.

Change of climate or environment are very efficient—if possible, a removal to town from the country or from one part of the country to another.

In certain cases when asthma is due to infection of the lung, when the sputum shows some predominating

organism, vaccine therapy is useful. This vaccine is prepared from the bacteria of the patient's sputum.

Iodide of potassium and stramonium mixtures, belladonna, and morphine are used. Morphine is given repeatedly in progressively smaller doses on each succeeding night for about a week, in conjunction with 5 minims of adrenaline of 1/1000 solution, or ephedrine $\frac{1}{2}$ to 1 grain, given orally several times daily over a period.

During the intervals of the attacks a tonic such as cod liver oil may be given. The patient needs plenty of fresh air and a light and easily digested diet. Test diets will show if various foods are responsible, which can then be avoided.

All food should be taken dry; tea and coffee may be taken between meals. The commonest offending foods are milk, eggs, shellfish, salmon, port, nuts, cheese, beans, tomatoes, strawberries, celery, cabbage and cucumber, and all foods which produce acidity, catarrh or abdominal distension.

Starchy foods must be restricted to a certain degree, also pastries, chocolates, sweets and cakes—which will not be difficult these days. Ordinary cane sugar should be replaced by barley sugar or glucose.

A ketogenic diet is in most cases advised.

Glucose for asthmatic children has given good results as they are often found to be suffering from ketosis.

Many patients make good progress when a change of diet is strictly carried out. A brisk emetic often cuts short an attack of asthma and the inhalation of stramonium leaves or very strong coffee taken on an empty stomach may give relief.

VEIN PUNCTURE.

COLLECTION OF BLOOD SPECIMENS BY VEIN PUNCTURE.

BY JOHN HATCHER.

A well-performed vein puncture is, practically speaking, a perfectly painless and rapid operation, but badly carried out it may be an extremely painful and prolonged affair, and one which leaves the patient with a permanent aversion to the collection of further specimens. An incompetent operator may not only cause the patient unnecessary pain, but he will also probably fail to obtain a specimen and if he does, may well conclude the proceedings by leaving the patient with a hæmatoma, a reminder of the inefficient manner in which this simple operation has been performed.

The Syringe and Needle.

Either a syringe of the Record type or all-glass pattern is necessary, and, of course, it must be not only sterile, but also absolutely clean. It is surprising how, from time to time, one is handed a sterile but dirty syringe, just a little carelessness in cleaning and perhaps quite a thin film of blood is left in the syringe, this will coagulate and firmly attach itself to the barrel during sterilisation with the result that the necessary free movement of the piston is rendered impossible. If the syringe is important, the needle is a thousand times more so, the actual size used is largely a matter of personal preference; the larger it is the less likely it is to block; but if the vein is small, as in children, it is much easier to find with a small needle. Also, if the

[previous page](#)

[next page](#)