

THE ADVANTAGES OF QUININE GIVEN INTRAVENOUSLY.

IT is rather surprising that the intravenous method of injecting Quinine with its many advantages is not superseding the hypodermic and intramuscular methods more rapidly. Though at first it may appear to be more difficult once one is accustomed to giving it this way it is quite easy and there are many points in its favour.

- (1) Surely it is less painful.
- (2) The effect of the drug is sure and quick.
- (3) There is no local induration and no fear, of an abscess, both of which are dangers attending the other methods.

The technique is simple—the requirements being a boiled syringe, bandage, tourniquet, spirit with which to prepare the skin, iodine to paint on afterwards (it does not at this stage discolour the prick).

The point of the needle should be sharp but short so that there will be no transfixation.

The bevelled surface should be upwards to enable the needle to glide along the vein. The vein should be felt as well as seen as judgment of its depth is essential.

No air should be left in the syringe. When the needle is in correctly blood rushes into it. It is very necessary to be sure the needle is in the vein. Never risk injecting into the surrounding tissues.

With these precautions accompanied by surgical cleanliness the danger of sepsis or air embolism is practically nil. These have been largely exaggerated by some who have obviously seen very few cases so treated.

The rapid effect of the drug given this way would I think alone justify a more universal employment of this method.

INFLUENCE OF TEMPERATURE ON HEALTH.

Taken from "A Treatise on Hygiene and Public Health" by B. N. Ghosh, F.R.F.P.S. (Glasg.) and J. L. Das, L.M.S. (Cal. Univ.). pp. 248-9.

IT has been observed that the most vigorous races are produced in places where the temperature is changeable and the difference between hot and cold seasons is great. On the other hand weak and languid races of men are to be seen in places having an equable temperature.

The high temperature of the tropics causes certain important changes in the European constitution. There is an increased peripheral circulation with a greater activity of the functions of the skin causing profuse perspiration, which in its turn keeps the body temperature normal. This adjustment of the system to counteract the external heat is not often sufficient for a new comer and the body temperature remains slightly higher than normal. The number of respirations is diminished, and from the fact that hot and

rarefied air contains, comparatively less oxygen, the intake of oxygen with the inspiration and the output of CO₂ with the expiration is also lessened. This diminished excretion of carbonaceous products is compensated by the increased functional activity of the liver, skin, bowels, and spleen. On the whole the general effect is that of diminished vital activity: the heart is weakened with slowing of the pulse, digestion is impaired, appetite lessened, and nutrition interfered with, as evidenced by loss of weight and diminished bodily activity. Apart from diseases, caused by parasites, microbes, and other unhealthy conditions, nervous disorders and internal congestion may be traced to the climatic conditions of the tropics: thus, the effect of heat on the system may be either direct or indirect. Directly it may cause diseases like sunstroke or fever, or may interfere with or suspend some of the most important and natural functions of the body. Indirectly it may produce heat, syncope, or asphyxia, deterioration of the blood and congestive disorders affecting the liver and bowels.

Effects of cold on health—The effects of cold are opposite to that of heat, whatever may be the temperature or thermometric readings, cold and its ill-effects are not uncommon in India. The cold season in Calcutta is very pleasant and invigorating to those enjoying sound health, but to many, at least at its beginning, it gives rise to chill and internal congestion, of all the vicissitudes to which the climate of India is liable, none interfere with health so seriously as the rapid transition of its temperature do. The common ill-effects of the sudden transition of temperature are acute hepatitis, colics, acute diarrhoea, or dysentery. When a person in the hot season leaves the plains for the hills, when the ascent is sudden, a rise of a few hundred feet accelerates the heart's action, checks perspiration, and causes profuse diuresis, or he may get a sharp attack of diarrhoea indicating that the liver and intestinal mucous membranes are acting vicariously for the skin.

EXERCISE.

Taken from "A Treatise on Hygiene and Public Health, p. 241. by B. N. Ghosh, F.R.F.P.S. (Glasg.) and J. L. Das, L.M.S. (Cal. Univ.).

THE necessity of exercise for the preservation of health cannot be over-estimated, yet perhaps few realise the importance of the changes it involves. Exercise is essential for the different organs of the body to work easily and effectively. It is also necessary to excite the demand for oxygen required for utilization of food and to promote the repair and formation of tissues. It is extremely important for old age not to lapse into habits of inactivity; there is the temptation of a man well on in years to give up walking to a great extent, to ride in carriages and to sit in the house a great deal. What has been learnt about the heart in recent years shows very clearly that unless it gets a certain definite amount of exercise it does not do its work as well as it otherwise would. According to Parkes a man takes about 8½ ounces more of oxygen on a "work day" than on a "rest day." Exercise should