

that matter, injected himself with five times the amount without experiencing any inconvenience.

In the great majority of instances the injection gives rise to no discomfort whatever. Occasionally, after the first injection, does the patient complain of slight tremors, the sensation of electric shocks, of weakness in the legs, restlessness or palpitation lasting at most a few minutes. The symptoms, such as they are, are in all probability due to the adrenaline, and are, if anything, attenuated by the pituitary extract.

Speaking generally, it may be undesirable to employ this treatment in cases in which, for any reason, hypertensor drugs are contra-indicated. At the same time this is a theoretical objection which is open to the criticism that, in the dose we recommend, administered hypodermically, we have never remarked any tendency to heightening of the blood pressure.

So much for the clinical aspect; it remains for us to explain the action physiologically, and this is no easy matter. Suppose we admit the general opinion that an attack of asthma is due to spasmodic contraction of the unstriated bronchial muscle fibres. Adrenaline and pituitary extract have, in general, the effect of causing the contraction of unstriated muscle fibre, so that *a priori* one would expect their action to do more harm than good. Clinically, however, the contrary is the case, so that we are driven to the conclusion either that the bronchial unstriated muscle fibres have a physiology differing from unstriated muscle fibres in general, or else that the spasm theory of asthma is to be discarded.

If we were led to the second conclusion we should have to ask ourselves whether, in an attack of asthma, a certain engorgement of the pulmonary circulation does not come into play. In such case, to explain the favorable effect of pituitary extract, we might invoke the fact, established by Wiggers, and also by one of us, that under the influence of pituitary extract the pressure is lowered in the pulmonary artery and raised in the carotid. But as this is essentially a practical article, it is unnecessary to carry this theoretical discussion farther. It will suffice to establish the unquestionable efficacy of this combination of adrenaline and pituitary extract in the treatment of the attack of asthma.

VITAL STATISTICS OF LONDON.

London's death rate increased heavily during the past year, principally because of the Spanish influenza epidemic, which was responsible for the demise of nearly 300 citizens. During the year there were 1,242 births, 545 marriages and 1,195 deaths, as against 1,143 births, 463 marriages and 867 deaths in 1917. During December 27 died of influenza, the 81 deaths recorded being exceeded by only two births. In December, 1917, there were 105 births against 58 deaths.