

## A CLINICAL STUDY OF HEROIN.

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A new agent in the treatment of cough, at present in wide use and attracting considerable attention in the medical world, is Heroin. It is a derivative of morphine—the diacetic acid ester—and is a white crystalline powder, almost insoluble in water, but readily soluble in water to which a few drops of acetic or hydrochloric acid have been added. It possesses many advantages over morphine as a respiratory sedative, among which the following may be mentioned: (1) It prolongs respiration, and at the same time increases the volume of each inspiration, making it a remedy much to be desired in the treatment of cough; (2) it is not an hypnotic; (3) absence of danger of acquiring the habit; (4) it does not weaken the respiratory apparatus; (5) it does not cause unpleasant disturbance of the stomach or intestines; (6) it can be prescribed in cases in which heart complications occur without risk of any deleterious effect upon that organ; (7) the ratio of the therapeutic dose to the toxic dose is considerably smaller than that of morphine.

The following cases taken at random from a clinical field of over 100 cases of pulmonary tuberculosis in all stages of the disease in this hospital will best serve to illustrate the efficacy of the drug:

CASE I.—A. B., male, age thirty-two, clerk, entered hospital with history of pain in left side, which began about four months before admission; night sweats; hacking cough, most troublesome at night, with markedly diminished secretion and slight dyspnoea at varying intervals during day and night. Physical examination revealed consolidation of upper lobe on left side, and of apex on right side. Mist. codeia, one drachm, three times daily and at midnight was administered and continued for two weeks, but with little result. At the end of this period the codeine was stopped and Heroin substituted in doses of one-twelfth grain three times daily and at midnight. In four days the cough began to lose its hacking character, and the secretion became more abundant; in about one week the cough could only be observed in the morning and evening, and remained sufficiently loose to render the patient very comfortable. No dyspnoea was observed a week after the Heroin was begun, and breathing still remained free. Mean respiration during first twenty days in hospital, a.m., 29; p.m., 29 3-20. Mean respiration for twenty days following the first administration of Heroin, a. m., 24 6-20; p. m., 25 1-20. For the night sweats the