4970

Observations on the Mechanism of Chloride Retention in Pneumonia.

ISIDOR GREENWALD.

From the Department of Pharmacology and the Littauer Pneumonia Research Fund, New York University.

In 4 experiments upon 3 dogs, following the intratracheal or intrapneumonic injection of Type I pneumococcus, there was a large increase in the excretion of chloride on the first day. Thereafter, the output was much lower than in control experiments. This finding resembles those reported by von Moraczewski[1] and by Terray[2] in regard to the increased excretion of chloride during the febrile period in malaria.

It is possible that there is a similar large excretion of chloride on the first day of pneumonia in man. This would account for the low concentration of chloride in the blood and for at least part of the marked retention usually observed. Other factors, such as the accumulation of chloride in the consolidated lung tissue and the retention of water, also play a part and account for the post-critical excretion of chloride that has so frequently been observed.

If the conditions in pneumonia should resemble those observed in these experiments, as much as 8 gm., or more, of sodium chloride might be lost on the first day of the disease. It is not surprising, therefore, that analyses of tissues of patients dead from pneumonia have failed to disclose where the retained chloride was deposited.

4971

On the Mechanism of Chemotherapeutic Action. I. Formation of the Parasitotropic Agent from Arsenicals.

L. REINER AND CLIFFORD S. LEONARD.

From the Research Laboratories, Burroughs Wellcome and Co., Tuckahoe, N. Y.

In a prior paper[1] a method was described by which single phases

[1] von Moraczewski, W., *Virchow's Archiv.*, 1899, clv, 11.

[2] Terray, P., *Z. f. klin. Medizin*, 1894, xxvi, 346.

[1] Reiner and Köveskuti, *Deutsche med. Wochschr.*, 1927, liii, 1988; *Orv. Hetilap.*, 1928.