

of diminution or of increase. Comparatively low leukocyte counts of 3,000 to 4,000 can be present over a long period without the appearance of any subjective symptoms or objective changes.

CONDENSED FROM BULL. HYG.

DETECTION OF FLUORINE-CONTAINING INDUSTRIAL FUMES BY ANALYSIS OF URINE OF CATTLE. E. KRÜGER, *Deutsche tierärztl. d. Wehnschr.* **56**:325, 1949.

Changes in teeth and bones of cattle poisoned by fluorine are rarely discovered before the animals are dead. Urine analysis permits early diagnosis of fluorine poisoning and makes it possible to save the lives of many animals. The fluorine contents of the urine of four suspected cattle ranged from 21.3 to 89.6 mg. per liter. The feed of these animals contained from 0.81 to 1.25 mg. fluorine per gram of dried leaf material.

RUDOLPH SEIDEN [Chem. Abstr.].

A CASE OF INDUSTRIAL ARSENICAL CANCER OCCURRING FOR THE FIRST TIME IN HUNGARY AND A COMPREHENSIVE ANALYSIS OF IT. G. FRANK, *Acta dermat.-venereol.* **30**:163, 1950.

Frank presents the case of a man aged 47 who had worked in a chemical factory between 1929 and 1938. His work was concerned chiefly with the production of an agricultural spray containing sodium arsenate. He also handled an antiscabious product used in veterinary medicine, which contained tar, fatty acids and resins. He had no symptoms until 1940, when he experienced a transient eruption of red spots all over his body. Ever since 1943, he had scaly patches over the entire skin, which left red spots when the brownish gray scales rubbed off. At that time he had been given arsenic by injection as well as by mouth, without the slightest improvement.

In 1947 a wart the size of a cherry developed on the nose. The growth disappeared in response to the application of radium. Biopsy had disclosed no cancerous degeneration. During 1947, three or four bean-sized knots and several scaly patches appeared on the scrotum. Examination at this time revealed all over the trunk and limbs, the right temporal region and the scrotum bean-sized, somewhat elevated, psoriasis-like, scaly patches, suggestive of Bowen's disease (precancerous dermatitis). Partly within these spots, partly in their neighborhood, there were hyperpigmented areas. The right half of the scrotum showed four pea to bean-sized knots partly connected by scaly areas. One of the larger nodes was ulcerated.

Biopsy specimens were obtained from the intact skin, from the lesions resembling Bowen's precancerous dermatitis and the lesions of the scrotum, the last revealing cancer. The authors also determined the arsenic content of biopsy material from these three sites and found that the respective figures for intact skin, lesions suggestive of Bowen's precancerous dermatosis and cancer of the scrotum were 0.3 mg., 106.7 mg. and 4.78 mg. per hundred grams. They point out that 0.2 mg. is regarded as normal for the intact skin.

Since dimercaprol (BAL; British-antilewisite) has proved helpful in arsenical and other metallic intoxications, the patient was given a 10 days' course, 100 mg. (as a 10 per cent solution in oil) being administered thrice daily during the first days and twice daily on the following days. Renewed biopsy of the lesions suggesting Bowen's dermatitis revealed that the arsenic had largely disappeared, the content now being only about 1.8 mg., compared with 106.7 mg. before treatment. However, the treatment with dimercaprol produced no clinical improvement.

CHRONIC CARBON MONOXIDE POISONING: A STUDY IN OCCUPATIONAL MEDICINE (ENGLISH TRANSLATION). A. GRUT. Pp. 229. Copenhagen, Denmark, Ejnar Munksgaard, 1949.

Grut presents extensive evidence to prove that prolonged exposure to carbon monoxide gradually leads to a syndrome of characteristic symptoms. He does not