CARBON TETRACHLORIDE POISONING IN MAN: I. THE MECHANISMS OF RENAL FAILURE AND RECOVERY. JONAS H. SIROTA and HATTIE WARMBRAND, J. Clin. Invest. **28**:1412-1422, 1949.

By means of the Fick principle, the renal plasma flow was determined in four male subjects with carbon tetrachloride poisoning. Renal venous blood was obtained by catheterization of the right renal vein. *p*-Aminohippurate (PAH) was the test substance. In two of the subjects there was a marked reduction in the renal plasma flow and renal PAH excretion rate. On the eighth day of oliguria the renal plasma flow in one of these subjects was 2.45 cc. per minute and the PAH excretion ratio 0.034; the others were similar. Because of the low PAH excretion ratios, C_{PAH} is not a valid measure of renal plasma flow during oliguria and early diuresis following CCl_4 poisoning. The oliguria and anuria and depressed renal clearance of all substances are the result of a marked reduction in renal blood flow and glomerular filtration as well as abnormal back diffusion of the filtrate. During the first stage of recovery there was little change in C_{In}, C_{Cr} or C_{PAH} (In = inulin, Cr = creatinine). In the second stage there was a rapid rise in C_{In}, C_{Cr}, and C_{PAH}. The third stage showed a gradual improvement in renal blood flow and glomerular filtration. (Thirty-five references.) J. T. M. [CHEM. ABST.].

PARANOID STATES OCCURRING IN LEADED-PETROL HANDLERS. V. L. KAHAN, J. Ment. Sc. **96**:1043 (Oct.) 1950.

Kahan presents the cases of six Indian males, between the ages of 20 and 40, who were hospitalized with emotional disturbances varying from acute excitement and confusion to depressive traits, such as hypochondriasis, vague fears and insomnia. They were members of military units who had been working with petrol (gasoline) in Iran, where the temperature had been as high as 115 F. Filling of the 4-gallon cans was done in the open air, by hand, with the men closely watching the filling nozzle. Cans were stacked in the holds of barges, and leakage from damaged cans produced a heavy concentration of fumes in the enclosed spaces in which the men worked daily for long shifts. The octane number of the gasoline had been considerably raised by further addition of tetraethyl lead.

The series of patients dealt with here includes those most severely affected. Many others, believed to be less severely affected, remained with their units and were dealt with by rotation of duties and other preventative methods, once the causative factor was appreciated.

The symptoms presented by these patients did not indicate gasoline poisoning alone, inasmuch as dizziness, confusion and collapse, rapidly disappearing on exposure to fresh air, were not present. The differential diagnosis had to consider malaria, consumption or deprivation of narcotic drugs, alcoholism, carbon monoxide or mercury poisoning, encephalitis, vitamin B complex avitaminosis, acute infections, general paralysis of the insane, and, since the gasoline was heavily leaded, toxic psychosis from tetraethyl lead.

The diagnosis of tetraethyl lead psychosis could rest on an authentic history of tetraethyl lead exposure and the presence of excitement, possibly maniacal, insomnia, anorexia, weakness and loss of weight, combined with increased lead concentration in urine and feces. The common features of plumbism do not occur.

AN INTRODUCTION TO THE NONCLASSIFIED LITERATURE DEALING WITH BIOCHEMICAL STUDIES OF EXPERIMENTAL URANIUM POISONING. SAMUEL SCHWARTZ and ELAINE J. KATZ, in Toxicology of Uranium: Survey and Collected Papers. ALBERT TANNENBAUM, editor. New York, McGraw-Hill Book Company, Inc., 1951, NNES Div. IV, vol. 23, pp. 262-273.

The nonclassified literature dealing with the biochemical effects of uranium poisoning has been reviewed. Representative studies of various tests have been noted with special reference to the literature of the past two decades. Most of these tests are based on alterations in kidney function. Chief emphasis has been given to nitrogen retention, acidosis, albuminuria and abnormalities in special renal clearance tests. Although the latter appear to be sensitive and reliable indexes of kidney dysfunction, several authors have pointed out that the classic inter-