in the miners after several years of work in the mines and that it was absent only in those persons in whom poisoning had occurred rapidly. Hypohemoglobinemia was mild, with from 3,000,000 to 4,000,000 blood corpuscles. Arterial hypertension, an early and constant sign, was present in 50 per cent of the patients with definite lead poisoning and in 46 per cent of the persons in whom lead poisoning was likely. The risk of intoxication by the digestive route proved to be practically nil. There may be only a short induction period: One mine digger presented definite poisoning after 10 months of work, and one loader and another mine digger after 1½ years.

PERIPHERAL BLOOD AND MYELOGRAM IN EXPERIMENTAL TRINITROTOLUENE POISONING. TOMMASO SESSA and ORAZIO LONGO, Folia med. **32**:448, 1949.

Daily doses of trinitrotoluene ($C_6H_2Me[NO_2]_3$) caused death in guinea pigs in three to eight days after a total dose of 0.6 to 2 Gm.; 0.04 Gm. per week caused death within a month. In rabbits 0.08 to 0.12 Gm. given weekly caused death in 30 to 45 days. The acute poisoning produced severe anemia with hyperchromatosis and high reticulocyte formation, leukocytosis and atypical, high erythroplastic activity of the bone marrow. Chronic poisoning produced in the guinea pig a more moderate anemia and reduced bone marrow activity, with prevalence of granulopoiesis over erythropoiesis. The prevalence of leukopoiesis was still more marked in the rabbit.

ADAPTED FROM A. E. MEYER [Chem. Abstr.].

BLOOD PHENOLS AND URINARY CONJUGATED SULFATES IN EXPERIMENTAL BENZENE POISONING TREATED WITH VITAMIN C. LIUGI PECORA, Folia med. **32**:489, 1949.

Inhaled benzene (C_6H_6) is oxidized by the organism to phenols, which are excreted as conjugated sulfates. For that reason the ratio conjugated S : total S increases in C_6H_6 poisoning. Rabbits were poisoned with daily injections of 1 cc. per kilogram of a 40 per cent solution of C_6H_6 in oil. A group received also 0.1 Gm. ascorbic acid intramuscularly. Treatment with C_6H_6 alone produced an increase in free and total phenols in the blood, followed by a drop that was more accentuated in the conjugated part. In the group treated with ascorbic acid the conjugated fraction increased more and the later fall was delayed. The conjugated compounds in the urine increased in the ascorbic acid group still more markedly and increased more slowly. Ascorbic acid also prolonged survival.

A. E. MEYER [Chem. Abstr.].

PHENOL IN BLOOD AND URINE IN EXPERIMENTAL INTOXICATION WITH TRINITROTOLUENE. GIUSEPPE GRAZIANI, Folia med. **32**:461, 1949.

Phenols were determined in the blood and urine by the method of Theis and Benedict (*Chem. Abstr.* **18**:3398). The phenols in the blood of six rabbits receiving a daily dose of 20 mg. of trinitrotoluene ($C_6H_2Me[NO_2]_3$) increased, while the urinary elimination dropped. This effect is related to the renal damage produced by the poison.

A. E. MEYER [CHEM. ABSTR.].

BAL AND LEAD POISONING: I. ACTION OF BAL ON COPROPORPHYRIN AND LEAD IN THE URINE. GIUSEPPE GRAZIANI, Folia med. **32**:467, 1949.

Rabbits were poisoned with doses of 0.1 Gm. $Pb(OAc)_2$ given orally every other day. One group received daily 10 mg. BAL per kilogram. The increase in elimination of coproporphyrin was equal in both groups but reached higher values in the BAL-treated animals because they survived longer. The Pb elimination was slightly higher in the BAL-treated animals. The elimination increased in all animals gradually, to become constant after 10 to 12 days.

FROM CHEM. ABSTR.