quantity of uric acid in saliva from men amounted to 2.10 mg. per 100 c.c. of the secretion; in saliva from women it amounted to 1.11 mg. per 100 c.c. We also succeeded in separating uric acid, in crystalline form, from saliva.

For normal individuals, the proportion of uric acid in saliva was independent of the diet, speaking generally, but was influenced by the rate of secretion as well as by the nature of the stimulant employed to accelerate the flow of the saliva.

Saliva appears to register promptly the variations in the endogenous metabolism of uric acid. We noted an almost immediate rise in the proportion of uric acid in saliva after increased muscular exertion, and after the ingestion of purine-free food following a brief fast. We also observed a definite relationship between the quantity of uric acid excreted in saliva, and the quantity eliminated simultaneously in the urine, in normal people on an ordinary diet.

The details of this study, and those related to it, will be published in the *Journal of Dental Research.*

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The effect of large doses of X-rays on the resistance of monkeys to experimental poliomyelitis.

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After a few passages through monkeys poliomyelitic virus becomes adapted and virulent for these animals. Hence slight variations in the susceptibility of these animals are not usually observed in experimental work. The original strain adapted to monkeys by Flexner and Lewis has been passed through many monkeys and stored in 50 per cent. glycerol in the ice-box, and its power to infect monkeys is very much diminished. This strain offers the opportunity of detecting variations in the susceptibility of the experimental animal to this infection. In two experiments an intracerebral injection of 1 c.c. of a Berkefeld filtrate of a 5 per cent. suspension of poliomyelitic cord containing the attenuated

virus produced typical experimental poliomyelitis in the monkey which has been exposed to large doses of X-rays (6 Holzknecht units daily for six or seven days), whereas in the non-rayed control no symptoms were observed. The doses of X-rays were sufficient to reduce greatly the number of circulating lymphocytes in the blood of the monkeys. In another experiment 0.75 c.c. of the filtrate produced typical experimental poliomyelitis in the X-rayed monkey, whereas 1.0 c.c. produced no symptoms in the control.

In an attempt to diminish an active immunity a monkey which had passed through an attack of experimental poliomyelitis and recovered with residual paralysis was exposed to large doses of X-ray so that the circulating lymphocytes were decreased from 27,000 per cu. mm. to about 2,500. Two separate intracerebral injections of active virus failed to produce any further symptoms or paralyses in this monkey.

35 (1410)

Intrapulmonary irrigation.

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In view of the limitations of the intravascular mode of therapy of respiratory conditions, as exemplified in pneumonia, a series of experiments has been conducted looking into the possibility of an intratracheal or intrapulmonary therapy for such conditions.

The data thus far secured demonstrates the fact, fundamental to any such therapeutic procedure, that the lung is much less susceptible to the introduction of fluid than has been generally assumed.

Normal dogs have been used throughout the work and all perfusions or irrigations have been made with normal salt solution. The fluid was introduced by the usual method of insufflation.

Repeated experiments have shown that the lungs can be entirely flooded with salt solution and the process of irrigation continued for at least two hours with the introduction of 30,000 c.c. of fluid without causing any evident harmful signs in bodily well-