

grain doses. When double this dose was taken, the urine responded to the test in five minutes.

Blanchier and Rochefontaine found that salicylate acid injected into the veins of a dog appeared in the urine in eight to ten minutes; in the saliva, in four to five minutes; and in the bile and pancreatic juice, in fifteen to twenty minutes. It is excreted in the urine chiefly in the form of salicyluric acid (a combination of the acid with glycochol), but also as salicylic acid and salicylate. Under one or other of these forms, Masso recovered virtually the whole amount of the ingested drug. Ryanon found traces of salicylic acid in the urine eight days after administration of the last dose. Weill, however, regards this period of elimination as not extending beyond thirty-three to fifty-six hours.

Whether the secretion of urine is increased by the salicylates or not, has not been absolutely determined. That there is considerable increase (30 to 100 per cent., according to various authorities) in the elimination of uric acid and urea is generally accepted, in view of the experiments of Haig, Kumagawa, and others; and the influence of these salts may account for slight neurosis. It has not been shown whether the hypersecretion of uric acid and urea represents changes in metabolism with increased formation of these salts, or is simply due to an acceleration in the eliminative process. In the treatment of acute rheumatism by salicylates, this elimination markedly increased during the first few days, usually declines thereafter, oftentimes, to a point below the normal output. Prof. Sée noted particularly the increased uric acid excretion in gouty cases, following administration of the salicylates. The sulphur compounds, as well as nitrogen, are also augmented, and there is some degree of leucocytosis (Cushing), all of which indicates some modification of metabolism, but whether accompanied by an increased oxidation is yet unknown.

It is to be remembered that urines containing salicylic salts reduce Fehling's solution, as well as a pseudo-reaction to Trommer's test, to some degree, and may thus mislead. A purple color is struck with perchloride of iron solution, which thus affords a simple test for the detection of the drug. The green-colored urine observed after free exhibition of the salicylates, as well as occasionally in susceptible individuals, appears to be due to indican and pyrocatechin.

The salicylates very probably enter all the fluids of the body; they have been detected in the bile, the flow of which they