

*Action on the Nervous System.*—Any effect produced by digitalis on the nervous system is indirectly brought about by its influence on the circulation. From full medicinal doses it is not uncommon to hear patients complain of headache, a band like feeling around the forehead, dizziness and also of colored vision, together with a sense of faintness, nausea or even actual sickness.

*Action on the Secretion of Urine.*—Digitalis has very little influence in increasing the quantity of urine in health, but in cardiac disease attended with dropsy, where there is a diminished outflow owing to the failing heart, it then acts powerfully as a diuretic. The diuretic power is solely due to its influence on the blood pressure. In order to bring about the full diuretic effects of digitalis it is necessary to give it in full doses. The effect of small and even of moderate doses is to increase the general blood pressure, including the pressure in the arterioles of the kidneys. While the general pressure is increased the quantity of urine is not increased. After, however, a certain quantity of digitalis has been introduced into the blood, the pressure in the arterioles of the kidneys gives away with the result of a rapid and great increase in the quantity of urine. This may last for several days, depending on the amount administered. If the drug is still continued, the fall in pressure which commenced in the arterioles of the kidney, extends throughout the whole arterial system with the result of a marked decrease in the secretion of urine.

It follows from this that there are three stages in the action of digitalis on the arterioles of the kidneys, and each separate action is attended by a difference in the amount of urine secreted.

1. From the action of small doses (tonic) we have a general increase of the arterial pressure. This stage is not attended by an increase in the quantity of urine.

2. From the effects of large medicinal doses when continued for two or three days, we have a fall in the arterial pressure in the kidneys, while the increased pressure throughout the rest of the arterial system remains. The result of this action is a great increase in the quantity of urine.