of capsule and slight cystic dilatation. The epithelium in practically all tubules is very markedly and extensively degenerated, showing granular and fatty degeneration. There are many casts. Large bunches of peculiar unidentified, uncolored needle-shaped crystals are also found in the tubules. Large areas in the sections show collapse of tubules with much cellular infiltration and new formation of cellular fibrous tissue between them. The appearances are those of a chronic parenchymatous nephritis. It is possible that these lesions are the result of one or the other poison, such as arsenic or phosphorus, which were used in destroying rats in this city. In this connection it is noteworthy however how rarely such lesions were observed in spite of the very extensive use of such poisons.

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The stimulation of adrenal secretion by emotional excitement.

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Dreyer's demonstration that splanchnic stimulation increased the content of adrenal secretion in blood from the adrenal veins has been confirmed by several observers. Adrenal secretion therefore is under control of the sympathetic system.

Major emotional disturbances indicate the dominance of sympathetic impulses. In the cat, for example, fright causes dilation of the pupils, inhibition of the stomach and intestines, rapid heart, and erection of the hairs of the back and tail. Do not the adrenal glands share in this widespread subjugation of the viscera to sympathetic control?

To try this suggestion the inhibition of contraction in strips of longitudinal intestinal muscle, sensitive to suprarenin 1:20,000,000, was used as a biological test. Blood was obtained from the cat when quiet, and again after the animal was excited by the presence of a barking dog, by introducing, through the femoral vein, into the inferior vena cava to the region of the liver, a small vaselined catheter. The blood thus obtained was defibrinated and applied to the intestinal strip at body temperature.

After an initial shortening the strip contracted rhythmically in blood from a quiet animal. In no instance did such blood produce inhibition. On the other hand, blood taken from animals after the emotional disturbance, showed more or less promptly the typical relaxing effect. As the emotional period was prolonged, the effect became prompter and more profound.

The view that inhibition of the contracting intestinal strip is due to an increased content of adrenal secretion is justified for the following reasons. (1) The effect was obtained in blood from the vena cava near the liver when that from the femoral vein taken simultaneously produced no inhibition. (2) Removal of the adrenal glands after tying the adrenal vessels resulted in a failure of excitement to produce the effect. (3) Adding varying amounts of adrenalin to inactive blood evoked all the degrees of relaxation that have been observed in excited blood. (4) Excited blood which produced prompt inhibition lost that power on standing or on being agitated by bubbling oxygen. These conditions together with the evidence that sympathetic impulses increase the secretion of the adrenal glands, and that during such emotional excitement as was here employed signs of sympathetic discharge were observable in the animal from the eye to the tip of the tail, prove that the effect was due to adrenal secretion.

Injected adrenalin is capable of inducing an atheromatous condition of the arterial wall in rabbits, especially in elderly individuals, and is also capable of evoking hyperglycemia with glycosuria. As Ascher has shown, by prolonged stimulation of the splanchnic nerves, prolonged secretion of the adrenal glands with maintained high blood pressure can be produced. In the light of the results here reported the temptation is strong to suggest that some phases of these pathological states are associated with the strenuous and exciting character of modern life acting through the adrenal glands. This suggestion, however, must be put to experimental test.