EXPERIMENTAL TOXIC APPROACH TO MENTAL DISEASES
(The reaction of the brain tissue to subcutaneous injection of enterogenous toxic substances—indol and histamin)

BY A. FERRARO, M. D., AND J. E. KILMAN, M. D.

FROM THE DEPARTMENT OF NEUROPATHOLOGY OF THE NEW YORK STATE PSYCHIATRIC INSTITUTE AND HOSPITAL, NEW YORK, N. Y.

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PART I

1. Introduction

For a number of years the advocates of the toxic origin of mental diseases have insisted on the occurrence of nutritive and digestive disturbances preceding or accompanying mental symptoms. Indigestion and dyspepsia in every form, anorexia, falling off in weight, and muscular flabbiness have commonly been found especially preceding attacks of melancholia.

According to A. Pick (1896) autointoxication produces marked nervous phenomena which may be classified as: (1) giddiness—sometimes a true vertigo, (2) headache, (3) heaviness and sense of pressure on the head, (4) cerebral vomiting, (5) convulsions, (6) psychic disturbances. He states also that insanity is often associated with constipation and is relieved when this is cured.

M. Allan Starr (1901) is quoted by Coriat in regard to the toxic origin of neurasthenia and melancholia as making a statement concerning the occasional occurrence of large quantities of indican or indoxyl in the urine in cases with a sensation of pain and fullness in the head and various motor disturbances. Coriat also quotes Wagner Von Jauregg as reporting that in psychoses due to gastrointestinal autointoxication in addition to acetone a considerable amount of indican is found. Also along the same line in his article on psychoses due to autointoxication Regis points out the occurrence of more or less considerable quantities of indican, acetone, diacetic acid, tyrosin and the conjugate sulphates in the urines of psychotic patients.

According to Clauston (1904) constipation and altered bowel content, in the direction pointing to imperfect digestion, primary and secondary, are present in more than 50 per cent of the cases as prodromata of various forms of mental diseases. A. D. Townsend (1905) in his article on mental depression and melancholia also expressed the view that from his own observations a large portion of cases suffering from melancholia are due to autointoxication resulting from the absorption of toxins from the alimentary tract. The symptoms pointing to a disturbed metabolic process