classed as hysteria, while cases showing symptoms acting principally through the autonomic system could be termed cases of neurasthenia. Of course, such a differentiation of symptoms need not imply that a given case of hysteria has no neurasthenic symptoms, or that a given case of neurasthenia has no hysterical symptoms. As is well recognized, a case very commonly may have symptoms of both a neurasthenic and an hysterical type. If, however, a distinction between neurasthenic and hysterical symptoms can be clearly made on a physiological, or an anatomic basis, much confusion and loose use of terms will be avoided.

In seeing psychotic cases, however, whether of dementia praecox, general paralysis, or manic depressive insanity, one is struck by the lack of correspondence between the emotional condition and many symptoms involving the autonomic system. Delusions of food pollution, etc., do not seem to cause nausea or interfere with the digestion. In the midst of a profound depression, nutrition is often maintained surprisingly well. Frightful fears are often experienced with little modification of pulse rate, etc. Etherization sometimes produces little somatic reaction. A general parietic reacts little or not at all to a lumbar puncture. In fact, changes in affectivity involving the autonomic system are seemingly a common occurrence. Whether a break between the central nervous system and the autonomic system occurs when a psychoneurosis turns over into a psychosis, is an interesting question. At least, a suggestion of such a possible break has been recognized as a change in affectivity and such a change in affectivity has been recognized as of value in prognosis and diagnosis.

The suggestion is here made that neurasthenic, hysterical, and psychotic symptoms are possibly to be distinguished from one another on physiological grounds based upon a differentiation between symptoms involving mainly the voluntary nervous system as in hysteria; symptoms involving mainly the autonomic system, as in neurasthenia, and symptoms showing possibly a break between the emotional activity of an individual and his autonomic nervous system as in a psychosis.

Clinical Department.

REPORT OF A CASE OF CHRONIC NEPHRITIS WITH UREMIA.

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In the course of a routine examination of the urea and non-protein nitrogen of the blood in

renal disease we happened upon the following case, a detailed report of which may be of general interest:

A baggage agent, aged 46, entered the hospital on September 22, 1913, complaining of vertigo and difficulty in walking. Eight months previous while at work he suddenly became dizzy and was compelled to remain in bed for ten weeks suffering from delirium and drowsiness. The left leg and forearm were numb at the time, there was partial loss of memory, difficulty of speech and vomiting. No previous history of lead poisoning, syphilis, alcoholism or scarlet fever could be obtained.

On examination the right pupil was slightly enlarged and sluggish and the fundi showed exudates and hemorrhages. The heart was enlarged, a faint systolic murmur was audible at the apex; the aortic second sound was accentuated at the base. The pulse was large and regular. The systolic blood pressure was 180 and the diastolic 120 millimeters of mercury. Both brachial radial and temporal arteries were tortuous and hardened. The urine averaged 1500 cubic centimeters but often exceeded two liters in volume, was of low specific gravity and contained albumin, casts and blood. The Wassermann reaction of the blood and cerebro-spinal fluid was repeatedly negative. No edema could be demonstrated at any time.

The patient remained in the same general condition for a time, the blood-pressure was persistently high in spite of treatment. In March, 1914, nocturnal dyspnea became pronounced, then mental symptoms developed culminating in uremic convulsions with profuse diaphoresis and chills. A partial cataleptic state followed and the patient died on April 11, 1915.

His blood* was repeatedly examined for non-protein nitrogen and urea nitrogen according to Folin and Denis (*J. Biol. Chem.*, 1912, Vol. II, p. 527); these figures together with the blood pressure and urinary findings are charted below.

While the patient was receiving a diet exceedingly low in proteins consisting of cereals, jellies and six ounces of milk per day, two 24-hour specimens of urine were obtained quantitatively, and preserved under toluol in the refrigerator. On March 14 the patient excreted 9.38 grams of nitrogen, of which 7.85 grams was in the form of urea nitrogen. On March 15 8.41 grams of nitrogen were passed of which 7.38 grams was in the form of urea nitrogen and 0.68 grams in the form of ammonia nitrogen.

Abstract of Autopsy Report (Dr. C. E. Royce). The heart showed hypertrophy and atheroma of the coronary vessels. The kidneys were of average size, weighed 150 grams, surface slightly scarred although the capsule stripped readily. The cortex measured 4 mm. and the medulla 12 mm. The markings showed fairly well. Microscopically, there was an excessive amount of connective tissue, thickening the walls of the vessels and Bowman's capsule, replacing many glomeruli and effecting the usual tubular appearance. Although diffuse, the newly formed tissue was most marked in the region of the arcuate vessels. The epithelium presented various degrees of degeneration especially in the medulla.

The low urea and non-protein nitrogen content of the blood (within normal limits) even during the height of the uremic convulsion is interesting as

* The blood and urine analyses were made by Dr. C. W. McClure, clinical microscopist to the University Hospital.

Date. 1914.	Phenolsulphonephthalein Excretion.	Total N. P. N. Mgs. per 100 Grams of Blood.	Urea N. Mgs. per 100 Grams of Blood.	Blood Pressure.
Jan. 12.....	37% in 2 hours			220
Feb. 3.....		35.0	21.2	200
Feb. 12.....		29.2	18.7	210
Feb. 23.....		30.2	20.2	230
Feb. 26.....		29.8	15.3	220
Mar. 1.....		27.5	16.3	208
Mar. 4.....	22% in 2 hours		15.0	205
Mar. 5.....		29.8	15.0	205
Mar. 8.....		28.0	15.3	190
Mar. 16.....	16% in 2 hours			
Mar. 20.....		31.6	17.2	150 (During uremic convulsions)
Mar. 30.....		33.4	18.4	180
Apr. 7.....	22% in 1 hour	34.5	24.6	174

illustrative of that type of what is clinically known as uremia, where the *character* of the substances retained seems to be of more importance than the total quantity of urea and non-protein nitrogen. The phenolsulphonephthalein excretion indicated a moderate degree of retention. Unfortunately the total nitrogen of the low protein diet which the patient received, was not determined, but an excretion of from 8 to 9 grams of nitrogen through the urine on such a diet must be considered ample.

This case occurred in the service of Dr. C. P. Howard, to whom we are indebted for the clinical studies.

Medical Progress.

PROGRESS IN GYNECOLOGY.

BY STEPHEN RUSHMORE, M.D., BOSTON.

CANCER AND OPERATION.

ALTHOUGH in the opinion of some enthusiasts radium is destined to supplant operation entirely in the treatment of cancer of the uterus, the actual basis of fact is not yet sufficient to carry widespread conviction as to the soundness of this view. Many operators still think there is a field for the radical operation, and Cobb¹ reviews the work on cancer of the uterus at the Massachusetts General Hospital in recent years, and gives a comprehensive presentation of the chief points in the operative technic. The radical operation is formidable and not to be lightly undertaken by the tyro, but in the hands of competent men it has given better results than any other method, in spite of the high initial mortality.

Cobb emphasizes the great care, from every point of view, that these patients demand, in order to shorten the time of operation, prevent shock, save blood, avoid infection and implantation metastases.

In his series are 367 cases, with an operability of 36.2%. The average duration of symptoms was about one year, but attention is called to the fact that the growth may have passed beyond

the stage of operability when the first symptoms appear. Cobb's figures for cases done over five years ago are small, six in all, in which the more extensive operation was performed, of whom five are well.

The combination of ether with spinal anesthesia Cobb deems very satisfactory. The growth is curetted and cauterized at the time of the radical operation or a few days before. The care of the ureters is important; they must be handled a good deal and freed for a considerable portion of their course in the pelvis. There is weighty objection to the use of ureteral bougies or catheters during operation. To avoid injury when the ureters are once freed, Cobb lifts them with tapes. The tying of the internal iliac arteries, a procedure which has been somewhat revived of late, is advocated and employed especially in the case of inoperable growths. After the uterus is removed and all the vessels are tied the peritoneal cavity should be closed off entirely from the field of operation and the extraperitoneal raw area should be drained by a small piece of iodoform gauze which does not come in contact with the ureters. Salt solution is given freely by the rectum, and the bladder is cared for by the use of urotropin and an inlying catheter. Cobb has seen no postoperative necrosis of the bladder.

It has been the custom to avoid secondary operations in cases of recurrence of carcinoma of the uterus. Especially is this true if a radical operation, abdominal or vaginal, was performed primarily. That this is not the best plan is suggested by Zweifel², who advocates secondary operations. It is true that at times the recurrence comes to the surgeon's attention too late for removal. But often only an exploratory operation will show conclusively whether removal is or is not possible. The principles in accordance with which the question should be decided, laid down by Franz and quoted with approval by Zweifel, are: the tumor or recurrence must be sharply defined on all sides, and only a small part of its periphery may be attached to the pelvic wall; involvement of the bladder does not preclude operation; immobility of recurrence is often due to connective tissue and not to actual tumor growth. It is to be remembered also that often