

that the blood of chronic nephritics sometimes shows a higher sugar content than normal. The lower contents in April and June are due probably to partial starvation in the terminal stage of her disease.

The patient had become so accustomed to her chronic uremic poisoning that it seemed she might live indefinitely. Finally, however, she developed a right-sided purulent pleurisy and died having the same symptoms with which she had entered the hospital nearly a year before.

Permission for a partial autopsy was obtained. The kidneys were small, firm, pale, with adherent capsules. Weight, 126 gm. The report of the pathologist, Dr. F. L. Burnett, is given.

"In sections of the kidneys almost one-half of the tissue is composed of fibrous cells. Fully one-half of the glomeruli are obliterated, and are evident only by a contracted mass of fibrous material which often presents hyaline degeneration. Many of the convoluted tubules, too, are obliterated, and those that remain show a hydropic degeneration. The descending and ascending loops of Henle are also obliterated; although more of these are apparent than any other parts of the tubule. Numerous hyaline and timely granular casts are apparent also. The capsule of the kidney is moderately thickened and the arteries which sometimes present a slightly thickened media are in general not abnormal. The tissue does not contain a great deal of fat. Scattered generally through the tissues are numerous areas made up of lymphocytes, but they are irregular in shape and areas of necrosis are not apparent within them."

The patient's clinical history might be explained from this picture of the kidney tissue. Apparently many glomeruli were destroyed and others spared. Those tubules which escaped destruction were badly crippled. The tubules on the whole suffered more than the glomeruli. The patient for a good while had a barely sufficient kidney parenchyma which gradually was choked out by the increase and spread of fibrous and scar tissue.

#### NON-TUBERCULOUS COMPLICATIONS OF PULMONARY TUBERCULOSIS.

By HERBERT F. GAMMONS, M.D., DALLAS, TEXAS.

THE differential diagnosis between pulmonary tuberculosis and other conditions simulating this disease in its local reflex and toxic symp-

toms will be in all probability, a problem for years to come.

The problem is made more difficult when we realize that many tuberculous suspects have in addition to an active or healed tuberculous focus an active focus of infection due to other organisms than the tubercle bacillus either in the lungs or in some other organ. However, in patients with sputum containing bacilli there are found one, two or more conditions which cause symptoms that are blamed on the tuberculous condition and which influence the prognosis and treatment greatly if discovered and remedied.

It is unfortunate that so many physicians after finding a positive sputum or physical signs in the chest, stop making further examination of the patient and feel that all symptoms such as temperature, chills, etc., are due to the tuberculosis. The natural course of a tuberculous infection is toward improvement, and in any given case of apparent good resistance, with a continuation of symptoms after proper rest and hygienic treatment for the tuberculous condition has been in effect, some other focus of infection should be sought out and treated.

This does not mean that reckless removal of tonsils and teeth is advocated in patients with lowered resistance. The probable improvement must be weighed against the probable reaction following operations. Nature, however, is burdened with infections and conditions, especially mental, in addition to the tuberculosis, which can often be remedied, which in many cases have prevented an arrest of the disease.

Many times a post-mortem examination has shown there may be superimposed infection in the lungs, the tuberculous infection while discharging a few bacilli being the slightest in extent and the influenzal or pneumonic condition being of greater extent and severity. Often the body tissues need building up, especially the blood, and occasionally, I have seen patients in whom a marked shortness of breath was apparently due to deficient oxygen-carrying properties of the blood and cleared up under hypodermic iron injection. It has been the habit with many physicians once a diagnosis has been made of pulmonary tuberculosis not to look further into the case, but to blame any and all symptoms on tuberculosis, and in some instances this attitude has been the cause of deaths on account

of the lowering of resistance, due to invasion of other organisms.

The improvement in patients' mental attitude following clearing up of other infections is wonderful at times, and this improved mental attitude increases resistance to tuberculous infection.

The following cases show what results can be accomplished in some instances. It is true that oftentimes tuberculous patients have tonsils removed and teeth extracted and still continue to exhibit the symptoms that were noticed before such operation. This fact, however, should not deter us from doing everything possible that promises help for any and every patient suffering with tuberculosis.

CASE 1. V. W. Advanced tuberculosis, slight fibroid condition at right top, left entirely infected with cavation in upper third. Pneumothorax had been administered with good results and a compression of lung resulted as shown by x-ray. Patient, however, continued to run slight fever and had frequent attacks of tonsillitis. Tonsils were removed and the operation was followed by a drop in temperature. Temperature has remained normal since tonsils with pus pockets were removed.

CASE 2. W. H. Scattered râles in both lungs. Slight cough, no expectoration. Fever persistent and also pains in different parts of the body. This patient had taken treatment for a long time without any decrease in temperature. X-ray examination of teeth showed abscessed tooth which was removed, and following this temperature has been normal.

CASE 3. F. L. Moderately advanced case of tuberculosis has had chronic appendicitis, symptoms of toxæmia and irregular temperature. Appendix was removed which was ulcerated and this was followed by drop in temperature to normal.

CASE 4. F. B. Advanced case of tuberculosis with marked shortness of breath. Blood examination showed a very low haemoglobin content. Hypodermic iron was administered and after a few doses breathing became normal.

CASE 5. Mrs. W. Scattered inflammatory conditions in both apices. Fever irregular and higher every third day. Blood examination showed malarial parasite and following eight weeks of quinine treatment, patient is running normal temperature and has gained in every way.

The above cases show that we must not stop when we have made a diagnosis of tuberculosis but we must find out also if there are any complications and, if so, overcome them.

## DURATION OF PREGNANCY.

BY HILBERT F. DAY, M.D., F.A.C.S., BOSTON.

DURING the last few years of caring for obstetrical cases, I have been somewhat troubled at figuring the probable date of delivery and it has been borne in on me that certain women were more apt to run over the customary ten lunar months than others.

With this in view, I have made a study of my last 25 private patients who were allowed to enter labor normally, taking into account particularly the interval which occurred between their menstrual periods. Of the 25 patients, 4 had an interval less than 28 days, and 8 an interval longer than 28 days, varying from 29 to 33 days and in one case 35. There were 13 cases with an interval of 28 days. The actual duration of pregnancy from the beginning of menstruation to the day of delivery has been figured out in all of these cases and the groups averaged with the following interesting observation:

NO. OF CASES	INTERVAL IN DAYS	ACTUAL DURATION OF PREGNANCY IN DAYS
4	less than 28	277
13	28	283
8	more than 28	295

The above noted findings are deduced from too few cases to draw any definite conclusions, but I wish to submit it as a suggestion for further study. The occurrence of longer pregnancies in women who have a longer than normal interval has induced me to choose for them as a probable date for confinement a later day than I would give to a woman who has a 28-day interval.

APPOINTMENT OF DR. CHARLES M. CAMPBELL.—Dr. Charles Macfie Campbell has been appointed professor of psychiatry at the Harvard Medical School. Dr. Campbell is a graduate of the University of Edinburgh, class of 1897, where he received his medical degree in 1901. He has been associated with the Psychiatric Institute of New York, 1908 to 1911, with the Cornell Medical School, and with the Bloomingdale Hospital. Since 1913, Dr. Campbell has been serving as associate professor of psychiatry at Johns Hopkins and associate psychiatrist at the hospital.