tinued several months. The beneficial effect of this drug in pellagra was first reported by the writer in 1912,³ and has been used continually by Dr. Pharr and myself since this time. We have not noticed the slightest harmful or unpleasant effect following its use. It seemed to exert a beneficial effect on all the varied manifestations of the disease, probably through some action on the central nervous system; its effect in relieving mental and nervous symptoms was, in some cases, remarkable, but it should be remembered that the action of the drug is slow in appearing and it is generally twelve to twenty-four hours after starting it before any improvement is noted.

In the last twenty-three cases we have given alkalis in some form, generally sodium bicarbonate gr. xv, one hour before meals; when constipation is present or when, as generally happens, it appears during the first few weeks of treatment, a small amount of sodium phosphate is given at the same time. This treatment aids in relieving the hypersensitiveness of the stomach and seems also to benefit digestion.

In considering the results of our treatment the question naturally arises as to how much of our success to attribute to the dietetic restrictions—abstinence from corn and sugar-cane products—and how much to the medicinal treatment used. The latter was not continued longer than three or four months except in a few cases, and the fact that there did not seem to be any increased tendency to recur after stopping medicinal treatment leads us to believe that, by following the dietetic rules which we imposed, our patients were free from the exciting cause of the disease. Seventy-four of our patients have been under observation more than a year. Mild recurrences have developed in five of these, but in each case we found that they had previously returned to the use of sugar-cane products.

As regards the effect of corn products, the first forty-nine patients were not restricted in this respect, but in comparing these cases with

those treated subsequently we are unable to note any difference in the results obtained.

ADDENDA.

Since submitting the above for publication (October 20, 1914) I have found a sugar cane sirup which is much more poisonous than any used in my former feeding experiments. This sirup is sold for table use and is also used in the manufacture of candies. A dog weighing forty pounds was fed one to two ounces of this sirup daily, mixed with meat and other foods; in one month there was redness of the legs and tail and pronounced asthenia. Death resulted in ten weeks. The total amount of sirup consumed was less than one gallon. Autopsy showed a large, yellowish-gray liver; catarrhal enteritis; duodenal ulcers. Microscopic examination of tissues not yet completed.

1. Blosser, Roy: A New Theory as to the Etiology of Pellagra, *Journal-Record of Medicine*, January, 1913, p. 527.

2. Blosser, Roy: Harmful Effects of Certain Sugar Cane Products, *The Journal A. M. A.*, August 3, 1914, p. 481.

3. Blosser, Roy: Five cases of Pellagra Treated With Gelsmium, *Journal-Record of Medicine*, November, 1912, p. 423.

SARCOMA OF KIDNEY.

By JOHN M. PROCTOR, M.D.,
Hot Springs, Arkansas.

G. L.—Age, 2 years and 8 months. Male. Residence, Louisville, Ky. Previous history prior to last illness: mother and father both living and in good health; one brother 5 years old, in apparent good health; no sisters.

Patient had never had any disease before present trouble, except an attack of malaria six months previously; had been in good health until 4 weeks prior to his death. At this time his mother while bathing him noticed an enlargement on left side of abdomen. The father, who is a physician, examined him and considered it an enlarged spleen, due to the previous attack of malaria. The tumor enlarged so rapidly that he called in two other physicians, who also called it an enlarged spleen, due to malaria. They placed him on iron, quinine

and arsenic. Tumor grew rapidly and patient began to show slight elevation of temperature. At this time the child became nauseated and would vomit its food. Essence of pepsin was then given to allay nausea and to assist him to retain other medicine. This treatment was continued for about two weeks with no relief. Parents were then advised to bring the child to Hot Springs for the baths. They arrived here on the evening of October 11, on which date I first saw the child.

Upon examination I found the following condition: The child was restless, irritable, and wanted to be held in the mother's arms continuously; very much emaciated, and had just vomited his supper. Pulse, 120; respiration, 40; temperature, 99. Tongue was coated. Respiration was much embarrassed; no cyanosis, abdomen markedly distended, with decided prominence on left side. Upon palpation a hard, indurated mass was found, completely filling the left half of the abdomen. There was a rounded projection in the left iliac region. The mass filled the left lumbar region also, but there was no prominent projection. In the left hypochondrial region there was a distinct depression between the costal margin and the upper border of the mass. There was no movement of the mass with respiration.

The above was the extent of my examination at this time. I prescribed calomel in small doses and advised to discontinue all other medicine. The child was placed upon a diet of milk and broths.

The next morning the mother telephoned me that the child was a great deal better and was playing about the house. That afternoon I was sent for hurriedly and told that the child was much worse and had had a sinking spell. Arriving there, I found the child in a very weak condition. His breathing was very labored, pulse, 130; temperature, 100. Very much nauseated. I administered stimulants, and in a short time the child was very much relieved. I suggested consultation, and Dr. G. A. Hebert saw the child with me the next morning. It was then moved to the sanitarium.

As we had a history of a diagnosis of malaria with an enlarged spleen, it was thought advisable to have his blood examined, to find if there were any active malarial plasmodia in his blood at this time.

Dr. T. E. Sanders examined the blood and urine and made the following report:

Urinary Examination.

Color, straw; heavy, white precipitate.
Quantity in twenty-four hours unknown.

Reaction, acid.
Specific gravity, 1014.
Albumin, absent.
Sugar, absent.
Indican, absent.
Amorphous urates, large amount.
A few red corpuscles.

Differential Leukocytic Count.

Polymorphonuclear, 82 per cent.
Lymphocytes, 12 per cent.
Eosinophiles, 1 per cent.
Myelocytes, 5 per cent.
Malarial plasmodia, absent.
Decided leukocytosis.

Diagnosis of renal sarcoma was made upon the following symptoms:

1. Age, infant.
2. Location of tumor, abdominal.
3. Rapid growth.
4. Immobility upon respiration.
5. Distinct space between costal arch and upper border of tumor.
6. Microscopical hematuria.
7. Inflated colon in front of tumor.
8. Absence of malarial plasmodia.

The child grew weaker and weaker, and respiration became more rapid and more labored; he became markedly cyanotic.

An operation could not be advised on account of pulmonary complications. The patient died in a cyanotic condition October 14 at 3:30 p. m.

As our diagnosis was different from the previous attending physicians, a request was made for a post-mortem, which was granted.

This was performed by Dr. Sanders and myself.

We made a median incision about six inches long. Found small intestines all pushed over to the right side. Descending colon in front of tumor and firmly adherent to it. Spleen normal. A slight compensatory hypertrophy of kidney. No fluid in abdominal cavity. Mass found to be tumor of left kidney, which we removed and found to be sarcoma.

"A CASE OF PRIMARY TYPHOID MENINGITIS."*

By J. E. ROBINSON, M.D.,
Temple, Texas.

Pathologist, King's Daughters Hospital.

This case was seen on the second day of the illness in connection with Dr. L. W. Pollock.