

food with a view to making up the deficiency. The vegetable proteids are capable of fully maintaining the nitrogenous equilibrium. More than this, it is not only necessary, but throws increased and entirely avoidable labor on the kidneys, either as albumen or as excess of urea and uric acid.

The amount of meat should be regulated with reference to anæmia, and also the digestion of the particular patient in question, but should never be excessive.

Milk is an excellent food and, in some cases, an exclusive, or almost exclusive milk diet can be employed, for a time with great advantage. Of course it cannot be prolonged indefinitely without additions and modification.

Tonics, especially iron, may be used. The preference is sometimes given to some of the ether-containing preparations, like the tincture of the chloride; but if any other form is more easily borne, the ether (say spirits of nitrous ether) can be added if necessary.

Water is of great importance. The value of a great number of spring waters, which have a reputation in such cases, depends mostly on the ingredients of which least is said—i. e., on the water itself, and not on the trivial amount of sulphate of soda, carbonate of lime, or infinitesimal trace of lithia dissolved in it. If there is a tendency to excess of uric acid, an alkaline water should be selected.

In *interstitial nephritis*—the cirrhotic kidney—we have to consider not merely the state of the kidney, but the condition of the circulation which so frequently accompanies and precedes it.

A great deal of use has been made of the nitrites, especially nitro-glycerine, with a view to diminishing the arterial tension. It is very doubtful whether the slight and temporary diminution produced by the doses usually given could be expected to be of great value. Certainly the results have not seemed to give decisive proof of it.

The alternative metals—mercury, silver, and gold—have been used.

Bright was certainly right in warning against mercury. The constitutional action of this drug is exceedingly inimical to the renal epithelium. This need not prevent the administration of calomel as a cathartic if considered specially desirable.

Gold appears to the writer to be as futile in controlling the formation and contraction of new interstitial tissue in the kidney as its sister, silver, has been found in similar conditions of the nervous centers.

Among the complications.—Edema being of long duration and often extreme, is likely to call for decided treatment. This may be of the eliminative kind, remembering, however, that in this case it is water, and not especially the urinary solids, we wish to carry off. Hence, drugs, requiring the ingestion of much water should be dis-

carded for those that may be given in small bulk, like the resinous cathartics.

Rest in bed often diminishes the œdema, but is much more likely simply to change its location. Mechanical relief, by tapping the great cavities, as in hydrothorax and as ascites, or the subcutaneous cellular tissue, is often called for. Punctures and incisions, if made with clean instruments, are not to be dreaded as causing local inflammation. They often drain for hours or days with advantage.

Edema of the lungs demands similar but prompt treatment, together with stimulation of the heart. The writer considers that, under these circumstances, the diffusible stimulants, alcohol, ether, and ammonia, are of more value than digitalis. Some physicians consider musk and castoreum as valuable stimulants to the flabby and dilated heart. Bleeding may be useful, especially in terminal uræmia.

A word may be added as to the *use of morphine in the headaches* of interstitial nephritis. It is said by some persons that morphine should be given with great caution if there is any albumen in the urine; and the writer cordially subscribes to this sentiment, and is willing to add that it should never be given to anybody under any circumstances (except perfect familiarity with the patient and his idiosyncrasies,) without great caution. This caution, however, should not be so great as to deprive such patients of the great relief which may be obtained by quite a small dose subcutaneously for the relief of intense headache. There are few circumstances under which it displays its powers more favorably than in these. Its use in convulsions was before spoken of.

Caffeine is often extremely useful.—Edes, *West. Med. Reporter*.

ÆTIOLOGY OF CANCER.—Schuchardt, reviewing Hauser's monograph on *Cylinder-celled Carcinoma of the Stomach, etc.*, considers the various theories which have been adduced.

He agrees with Hauser in setting aside the infection theory and hypothesis of a still undiscovered cancer bacillus. In all "infective tumors" produced by micro-organisms, and all other new tissue formations brought about by parasites, we have to do merely with a growth of the local tissue, and the metastases of such infective tumors are never found proceeding from a growth of cells which have escaped from the primary mass. On the contrary, the metastatic formations arise solely by the action of escaped micro-organisms upon the tissue in which they come to rest, just as in the case of the primary mass. The successful transferrings of carcinoma from one animal to another (Hanau) are to be regarded merely as transplantations with further growth of the transplanted tissue, and show nothing more than that the can-