

local treatment should be discontinued, and tonics, of which the best are nitromuriatic acid and strychnine, should be administered.—*Therapeutic Gazette*.

### **The Effect of Alcohol and Alcoholic Fluids upon the Excretion of Uric Acid in Man.**

To the *American Journal of Physiology*, Beebe contributes the result of an original research on this subject.

After a consideration of his experiments, it hardly seems possible to doubt that alcohol, even in what is considered by the most conservative as a moderate amount, causes an increase in the excretion of uric acid. And this effect is seen almost immediately after taking the alcohol.

The following points indicate that the effect is due to a toxic effect on the liver, thereby interfering with oxidation of the uric acid derived from its precursors in the food :

1. Alcohol taken without food causes no increase.
2. There was a smaller increase in excretion in one experiment in which the diet contained much less purin than it did in another experiment.
3. The maximum increase occurs at the same time after a meal as it does when purin food but no alcohol is taken.
4. The purin bases are affected to the same degree as the uric acid.
5. Alcohol is rapidly absorbed and passes at once to the liver, the organ which has most to do with the metabolism of proteid cleavage products.

There is no evidence that the alcohol has merely hastened the excretion of urates normally present in the blood; the increased excretion means that a larger quantity has been in circulation, and although it is classed by Von Noorden among the substances easily excreted, still most physiologists would consider the presence in the blood of this larger quantity as undesirable. Certainly in pathological conditions it might be harmful.

If we accept the origin of the increased quantity of uric acid to be in the impaired oxidative powers of the liver, the results of these experiments will have greater significance than can be attributed to uric acid alone. For the impaired function would affect other processes which are normally accomplished by that organ, and the possibilities for entrance into the general circulation of toxic substances, of intestinal putrefaction, for instance, would be increased. The liver performs a large number of oxidations and syntheses designed to keep toxic substances from reaching the body tissues, and if alcohol in the moderate quantity which caused the increase in uric acid