Note on plasmakinin.

by

K. LAKI.

Since the preceding papers have been closed down the experiments on plasmakinin showed that all the different globuline fractions of oxalated plasma obtained by ammoniumsulfate fractionation were active. If, however, the tests were made quantitatively it was found that the bulk of the active substance was brought down at 0,25—0,30 ammoniumsulfate saturation at which the fibrinogen precipitates. At the other saturations only 1 or 2 percent of this quantity came down.

If the fibrinogen, precipitated by the ammoniumsulfate is redissolved and then treated with alcohol or acetone, the precipitate is found to be inactive even if the precipitation was performed at low temperature where the proteins were not denatured.

Further experiments showed that an alcohol-soluble lipoid could be obtained from plasmakinin which showed almost the original activity when tested on Mellanby-fibrinogen.

The lipoid can be obtained in alcoholic solution in the following way: Fibrinogen is precipitated from the oxalated cattle plasma by 0,25 ammoniumsulfate saturation. The precipitate is centrifuged down and thoroughly washed with acetone and extracted with alcohol at room temperature. The alcohol is evaporated in a vacuum and the residue emulsified with water and tested on Mellanby-fibrinogen.

The active substance can also be extracted from the acetone-treated powder with petroleum ether. If the petroleum ether solution is concentrated in a vacuum, the addition of absolute alcohol produces a small quantity of an inactive precipitate, while the active substance remains in the alcoholic solution. This lipoid thus behaves similarly to the analogous alcohol-soluble lipoid fraction of brain. When this lipoid is exposed to air it looses the activity, probably owing to oxidation.