It seems to us possible that thymonucleic acid consists not of a tetra- but of a penta-phosphoric acid. On this assumption and on further assumptions that the oxypurins and oxypyrimidins form anhydrids with the corresponding sugars, one would deduce the following formula for nucleic acid: $C_{54}H_{71}N_{20}O_{37}P_5$.

Calculated.

C 37.0 %
H 4.0
N 16.0
P 9.0

Found by Levene in 1905.

C 37.78 %
H 4.86
N 16.51
P 8.91

55 (311)

Regarding the innervation of the blood vessels of the kidney.

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The blood flow through the left kidney was determined by means of the stromuhr described previously.¹ Having determined that the left splanchnicus major, as well as the plexus renalis, contains vaso-constrictory fibers for the corresponding kidney, different fibers of the plexus were isolated and stimulated separately. Of five nerve-fibers tested, four proved to be constrictory and one dilatory. The constricting fibers displayed different grades of effectiveness.

By cutting the fibers composing the plexus, a faster blood flow was obtained. Cutting the nervi vagi in the neck produced a slowing of the renal bloodflow. Division of these nerves above the diaphragm did not seem to change the flow very markedly.

In another series of experiments the right splanchnicus was stimulated while the bloodflow through the left kidney was being measured. The results indicate that the innervation of the kidney is bilateral. Although stimulation of the right splanchnic produced a vaso-constriction in the left kidney, the effect was much weaker and more gradual than when the left nerve was used.

¹ Burton-Opitz : This journal, 1907, iv, p. 24.