tinguishable. The drop toward negativity is faster, and the negativity obtained is greater on the average for the group who had experienced myocardial infarction prior to the age of 40 than for their comparable "normal" control group. The drop toward negative values is slower, and negativity is not obtained on the average for a group known to be mentally defective.

References and Notes

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Communications

Preliminary Studies on the Structure of Angiotonin

Angiotonin of a purity 2 to 3 times that of Edman (*1*) has been obtained by utilizing sodium chloride fractionation, adsorption on and elution from Amberlite IRC-50, and finally partitioning on a Celite column using a butanol-propanol : sodium chloride-acid solvent system (*2*). By partitioning in a countercurrent apparatus between butanol-propanol and 0.1*N* hydrochloric acid, an angiotonin was obtained of even greater purity. Only one active pressor principle was evident after 100 transfers. Angiotonin prepared in the afore-described manner was used in the following analyses.

A two-dimensional chromatogram (Fig. 1) of a hydrochloric acid hydrolysate shows 13 different amino acids to be present in the angiotonin molecule. The leucine spot was later shown, by a Dowex-50 column (*3*), to contain both leucine and isoleucine, making a total of 14 different amino acids.

The amino end-group was determined by the 1:2:4-fluorodinitrobenzene (DNP) method of Sanger (*4*). The ether soluble fraction from the acid hydrolysis of DNP angiotonin was chromatographed by the method of Biserte and Osteux (*5*) and found to contain only DNP aspartic and some dinitroaniline. Only N^5 DNP lysine was observed in the water-soluble fraction. The fact that only one amino derivative was found is evidence that the angiotonin used here is mainly one entity.

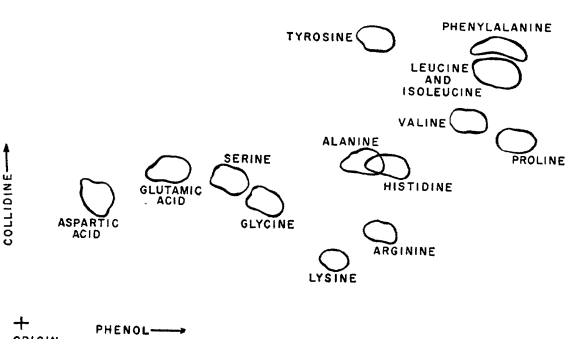

Fig. 1. Two-dimensional chromatogram of an acid hydrolysate of angiotonin, using phenol and collidine as the developing solvents. The amino acids were visualized by spraying with ninhydrin and, after steaming, with diazotized sulfanilic acid.

By hydrazinolysis (*6*) of angiotonin, the amino acid on the carboxyl end could be isolated as the free amino acid. It was then chromatographed (two-dimension) by the same procedure as is illustrated in Fig. 1 and shown to be either leucine or isoleucine.

Chromatographic analysis of the hydrolysate, using a Dowex-50 column (*3*), gave the amino acids shown in Fig. 1 in the following molecular ratio: 2 aspartic acid, 1 serine, 1 glutamic acid, 2 proline, 1 glycine, 1 alanine, 1 valine, 1 isoleucine, 1 tyrosine, 1 phenylalanine, 2 leucine, 2 histidine, 1 lysine, 2 arginine.

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The Use of Electrically Conducting Glass for Counting Lesions*

A device has been constructed that greatly facilitates counting the local lesions on *Nicotiana glutinosa* which appear after viral infection. The novel feature of this counter is the electric conducting glass employed. Because the glass is frosted and translucent, its entire area can be illuminated softly and evenly

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