isotopic method of Schayer, and expressed as dpm per gram. Varying concentrations of bradykinin were used. One group received 50 micrograms per injection, another 250 μg.

By day 14 tumors on animals from the 250 μg bradykinin dose group were retarded in growth (6. 2± 0.7 S.E.M mm diameter increase) as compared with the saline-injected controls (16 ± 2.5 S.E.M. mm diameter increase). The 50 μg dose group was intermediate in growth rate between the control and the 250 μg group. Results are significant by value of less than ap.005 T-test. Splenic HDC the 250 μg bradykinin dose group was significantly elevated ($p = .05$) over the saline control group, (111,905 ± 23,000 dpm vs 49,597 ± 18.077 dpm), 8 hamsters per group. Normal hamster histidine decarboxylase levels were measured at 300,000 ± 95,000 dpm.

Histological study demonstrated no lymphocytic infiltration in non-injected tumor controls; saline-injected controls contained scattered lymphocytes, and bradykinin-injected tumors were massively infiltrated by mononuclear cells (with evidence of increased tumor cell destruction in these areas), as well as mononuclear cells in non-injected tumors on two-tumor bearing bradykinin injected animals. Second tumors on controls contained no lymphocytic infiltration. Non-injected tumors on two-tumor animals were not retarded in growth significantly despite accumulation of mononuclear cells.

These findings suggest a potential role for inter-related vasoactive substances (which act as mediators of inflammation) in the growth and development of neoplasms and possibly in the therapy of neoplasia.

ISOLATION OF PORCINE SUBMANDIBULAR KALLIKREIN

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Kallikrein from porcine submandibular glands was isolated by acetone precipitation, batchwise DEAE-sephadex adsorption, and affinity chromatography on trasylol-linked sepharose resin. Benzamidine was used to elute bound kallikrein from the resin. The specific activity of the purified kallikrein, assayed by the combined ADH/BAEE method, was 107.4 U/E280. When this kallikrein was subjected to disc gel electrophoresis at pH 8.9, only one band was observed. However, after treatment with SDS, disc gel electrophoresis gave one major band with 3 faster-running, less intense bands. Isoelectric focusing of the kallikrein on polyacrylamide gel discs gave an isoelectric point of 3.8 ± 0.2. This is similar to the isoelectric point 4.05/g pancreatic kallikrein B, measured on a sucrose-density gradient (Fiedler, Hirschauer and Werle, 1970).