At the end of this time the tumor in each animal occupied the whole abdominal area. There was no ulceration or discharge. The 6 animals were killed and at autopsy no metastases were found. The tumor in each control animal was highly vascular and no necrotic areas were observed. In each experimental rat the tumor consisted of a thin layer of active sarcomatous tissue which surrounded an extensive central area containing a large amount of hemorrhagic fluid.

Conclusions. These data indicate that cobra venom is a destructive agent for the cells of the Fujinami rat sarcoma, but its therapeutic value is limited because of its localized action on the tumor cells, leaving the unaffected cells free to grow at a rapid rate.

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Effect of Intracisternal Injections of Acetylcholine.

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Dogs under ether anesthesia were used for all the experiments. Blood pressure and respiration were recorded. Intravenous injections of acetylcholine were given through a cannula in the femoral vein and the intracisternal injections were given through a needle previously introduced into the cisterna magna. The needle was kept in place throughout the experiment.

In a series of 11 dogs intracisternal administration of acetylcholine gave an elevation of blood pressure in all the animals. In some of them an exaggeration of respiration, particularly in its amplitude, was observed. There was no case in which respiration was arrested. The initial dose for an appropriate response varied from 1-10 gamma. With subsequent intracisternal injections, increasingly larger doses were required to produce a similar rise of the blood pressure. The rise became less sharp but more prolonged with successive injections. Sectioning the vagi and atropinizing the animal abolished the intravenous but not the intracisternal response to acetylcholine. The intravenous response was invariably depressor.

Acetylcholine applied directly to the floor of the exposed IVth ventricle also produced a rise in blood pressure. The site of stimulation is now under investigation.