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Remarks on and exhibition of specimens of a metastasising sarcoma of the rat.

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The specimens which the authors exhibited consisted of a mixed cell sarcoma of the seminal vesicle of a white rat which has been transplanted successfully into a series of white rats. The original tumor, which was found in a rat dying spontaneously in the laboratory was as large as a walnut. Its surface was covered with peritoneum and its consistence was firm. Thus far it has been transplanted to full-grown and young rats both by subcutaneous and by intraperitoneal inoculation. The feature of the tumor which we wish especially to emphasize are the large and numerous metastases which have appeared in the inoculated rats. The rat exhibiting the original tumor did not show visible metastases. But in the animals which have succumbed after successful inoculation, the metastases have been numerous and of large size. They have appeared in the lungs and kidneys, and in one instance, following intraperitoneal injection, in the ribs and intercostal muscles. As the specimens show, the nodules in the lungs and kidneys may reach large dimensions, taking in a segment of the kidney or an entire lobe of the lungs. The animal in which matastases existed in the intercostal muscles showed large nodules in the lungs; in this animal a growth from the lung into the pericardium, and from the pericardium into the heart wall, took place. The secondary tumors have the same structure as the primary tumors. They are made up of spindle-shaped and polygonal cells, the latter being often of large size, with lobed or irregular nuclei. Intercellular substance is present, and it is in places fibrillated.

The epicardium in the rat in which growth occurred in the myocardium, showed invasion of the serosa by the sarcomatous cells, spreading doubtless from the nodule mentioned and causing sarcomatosis of the serous membrane. This tumor is being further transplanted and studied in its biological relationships.