With respect to gall bladder disease, the opinion is that were neuralgias, gastralgias, cardialgias forever buried, there would be more accurate diagnoses, as these rarely occur as entities, but usually as the result of some stomach or biliary lesion. More than ninety per cent, of the so-called neuralgias of the stomach, where there were few symptoms save sudden pain and occasional vomiting, proved to be gall bladder trouble, while the remaining small number were of duodenal or appendiceal origin.

In uncomplicated gallstone operations the mortality is 2.47 per cent.; if the operation is postponed until jaundice supervenes, the mortality becomes 10.40 per cent. Hence the necessity of early action.

Tumors should not be watched, they should either be removed or let alone.

Cancer is a curable disease if we can remove the primary growth and the lymphatic ducts contributory.

Four out of five of tumors of the breast, at all ages, are malignant, one-half of the balance will become malignant.

Cancer of the breast with supraclavicular involvement is inoperable. Sixty-two per cent. of ulcer of the stomach appear in men, thirty-eight in women.

Always report the post-mortem findings, for if there is a lesson to be taught it is right that that lesson should travel as far as possible.

## SURGERY OF THE KIDNEY AND URETER.\*

By W. J. MAYO, M.D., Rochester, Minnesota.

A FTER discussing the embryological development of the kidney and contiguous parts, Dr. Mayo went on to say: When you have a horse-shoe kidney you usually find it in the posterior position. Pretty much all horse-shoe kidneys are low-lying kidneys. They are seidom higher than the region of the umbilicus. Sometimes they come higher than that, but they are always low kidneys. As to blood supply found in the kidney, there are usually two rows of calices. There are usually from six to eight in each row. The anterior of the rows of calices and half of the posterior are supplied by the anterior arteries; the posterior artery supplies the balance. The point is, if you want to get the vascular center of the kidney, you find it about three-fifths of an inch from the anatomical center. The entire top of the kidney gets its supply from the anterior blood vessels. The blood vessels as they divide up

<sup>\*</sup> Extempore address delivered before the Surgeons' Club, Rochester, Minnesota, November 7, 1906.