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R. E. Reinhard

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SOLITARY PULMONARY METASTASIS FROM HYPERNEPHROMA NINE YEARS FOLLOWING SURGERY

R. E. REINHARD, M.D.*

Long term survival following nephrectomy for hypernephroma is not common. In one study it was found that 19.5% of patients with proven hypernephroma were alive at the end of ten years; only 9.08% were free from tumor at the end of a ten-year period. Although there has been mention in the literature of patients who have survived twenty years or longer, these cases were uncommon.

A 66-year old white male was first admitted to the Henry Ford Hospital in 1952 with right flank pain and microscopic hematuria. A retrograde pyelogram demonstrated a tumor deformity of the right kidney (Figure 1). There was no evidence of metastatic disease. Surgical exploration revealed a tumor in the lower pole of the kidney. The microscopic diagnosis was clear cell carcinoma (Figure 2). "The cell type of this tumor is a large vacuolated cell, having clear cytoplasm and distinct cell borders. The nucleus is moderately small in comparison to the size of the cell. It is oval and eccentrically placed. The cells tend to group themselves, and are surrounded by a moderately thickened stroma which presents much the appearance of a honeycomb. There are some rather large strands of fibrous trabecular running throughout the growth." Of the various histologic types, these reportedly have the best prognosis.

Following surgery, no irradiation was given and the patient remained asymptomatic. Interval examinations failed to reveal evidence of recurrence.

This patient was again admitted to the hospital in 1961 for surgical exploration of an enlarging lesion in the lingula of the left lung. He denied pulmonary symptoms. This lesion was noticed on a routine chest x-ray (Figure 3). Positive physical findings were a left inguinal hernia, varicose veins, and mild hypertension. Routine laboratory studies were within normal limits. X-rays of the left knee revealed cystic areas in the upper tibia and fibula, which were interpreted as being benign. A recent I.V.P. showed a normal left pyelogram. The patient was explored through a left thoracotomy incision, and a neoplasm was found in the superior portion of the lingula. A left upper lobectomy was done. The patient's postoperative course was satisfactory, and he was well when last seen. The microscopic diagnosis was metastatic renal carcinoma (Figure 4). "The tumor is composed predominantly of clear cells arranged in diffuse sheets and in solid alveolar masses. The cells are cuboidal and have a well defined clear cytoplasm. The nuclei are small, round, and deep staining. This tumor has essentially the same structure as the original hypernephroma."

DISCUSSION

Metastases occurring several years after resection of the primary lesion are most of the kidney most commonly metastasizes to bone, lung, and brain. However commonly seen in carcinoma of the thyroid, occasionally in carcinoma of the breast, ocular and cutaneous melanoma, and hypernephroma. It has been found that carcinoma

*Department of Urology
Figure 1
Retrograde Pyelogram of the Right Kidney Showing Tumor Deformity.

Figure 2
Microscope Examination Showing Clear Cell Carcinoma.

Figure 3
Chest X-ray 9 years after Operation Showing Lesion in Lingula on Left Side.

Figure 4
Microscopic Examination again Showing Clear Cell Carcinoma.
Metastasis from Hypernephroma

metastases may be found in the gallbladder, bile ducts, skin, corpus cavernosum, epididymis, intestine, pancreas, thyroid gland, pericardium, heart, mediastinum, seminal vesicles, mouth, external auditory meatus, and phalanges. Metastases from hypernephroma may occur in only one organ. Those in the lung may occur as single nodules or cotton wool patches.²

In our patient, no evidence of metastatic disease was present until nine years following the initial surgery. As far as we are able to determine, this represents a solitary metastasis.

SUMMARY AND CONCLUSIONS

A patient with a solitary lung metastasis from a hypernephroma nine years following nephrectomy is presented. Because of the sometimes erratic behavior of these tumors, close follow-up is recommended.

REFERENCES