

MUSCLE AND SMALL INTESTINAL METASTASIS OF RENAL CELL CARCINOMA MARKEDLY RESPONSIVE TO INTERFERON- α THERAPY : A CASE REPORT

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Skeletal muscle and small intestine are rare sites of metastasis in renal cell carcinoma. Therefore very few reports of interferon-alpha (IFN- α) therapy exist for these types of metastasis. Here, a case of metastatic renal cell carcinoma to muscle and jejunum is reported. After IFN- α therapy for 9 weeks, muscle metastasis completely disappeared and intestinal lesions were markedly reduced. However, subsequent patient compliance for this therapy was poor, resulting in death after relapse of the RCC.

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Key words : Renal cell carcinoma, Metastasis, Small intestine, Muscle, Interferon

CASE REPORT

A 53-year-old male had undergone partial duodenectomy and Billroth I type of reconstruction due to duodenal ulcer at the age of 29. He presented to the hospital with general fatigue. Laboratory data indicated a hemoglobin level of 6.2 g/dl. However, all other data were within normal limits. Enhanced computed tomography (CT) indicated a left renal tumor and high density mass in the right longissimus thoracis muscle (Fig 1a). The tumor in the muscle was greater than 15 cm in sagittal section. Subsequent right hemiplegia was observed. Magnetic resonance imaging (MRI) indicated a 40 mm mass in the left frontal lobe of the brain. Initially tumorectomy of the brain was performed, and then three weeks later a retroperitoneoscopic nephrectomy was performed. Pathological examination indicated Stage pT3aN1M1, unclassified RCC, partly including clear cell RCC (Fig 2a, 2b).

Muscle metastasis rapidly continued to worsen. CT

scans (obtained before nephrectomy, 6 weeks after the initial examination) showed many new lesions in other skeletal muscles. Postoperatively, severe anemia continued. Gastrointestinal fiberoscopy demonstrated multiple polypoid tumors in the jejunum. Biopsy of the tumor was performed (Fig 3a). Pathologically, the brain tumor, the dorsal muscle and small intestinal tumors were all poorly differentiated (Fig 2c – 2e). Therefore, it was difficult to diagnose the primary tumor site. Clinically, the conclusion was metastasis of a primary RCC because features of a poorly differentiated tumor and clear cell cancer were seen in a single tumor in the kidney, the respective poorly differentiated tumors were morphologically similar, and since no other organs exhibited clinical malignancy.

From 1 week after nephrectomy, systemic immunotherapy (6×10^6 units of IFN- α) was administered 3 days a week. After 6 weeks of this therapy, both muscle and intestinal lesions were markedly reduced (Fig 3b). There were no noticeable adverse reactions due to

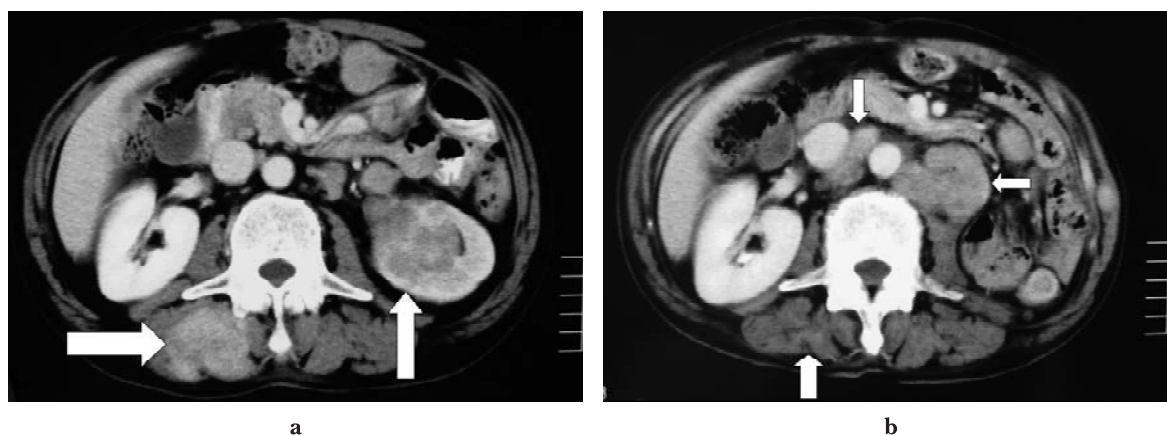


Fig. 1. a) Abdominal CT indicating a left renal tumor and an enhanced mass within the right longissimus thoracis muscle (arrows). b) CT scan obtained on the second admission. Muscle metastasis completely absent, but bulky lymph nodes present after discontinuation of IFN- α .

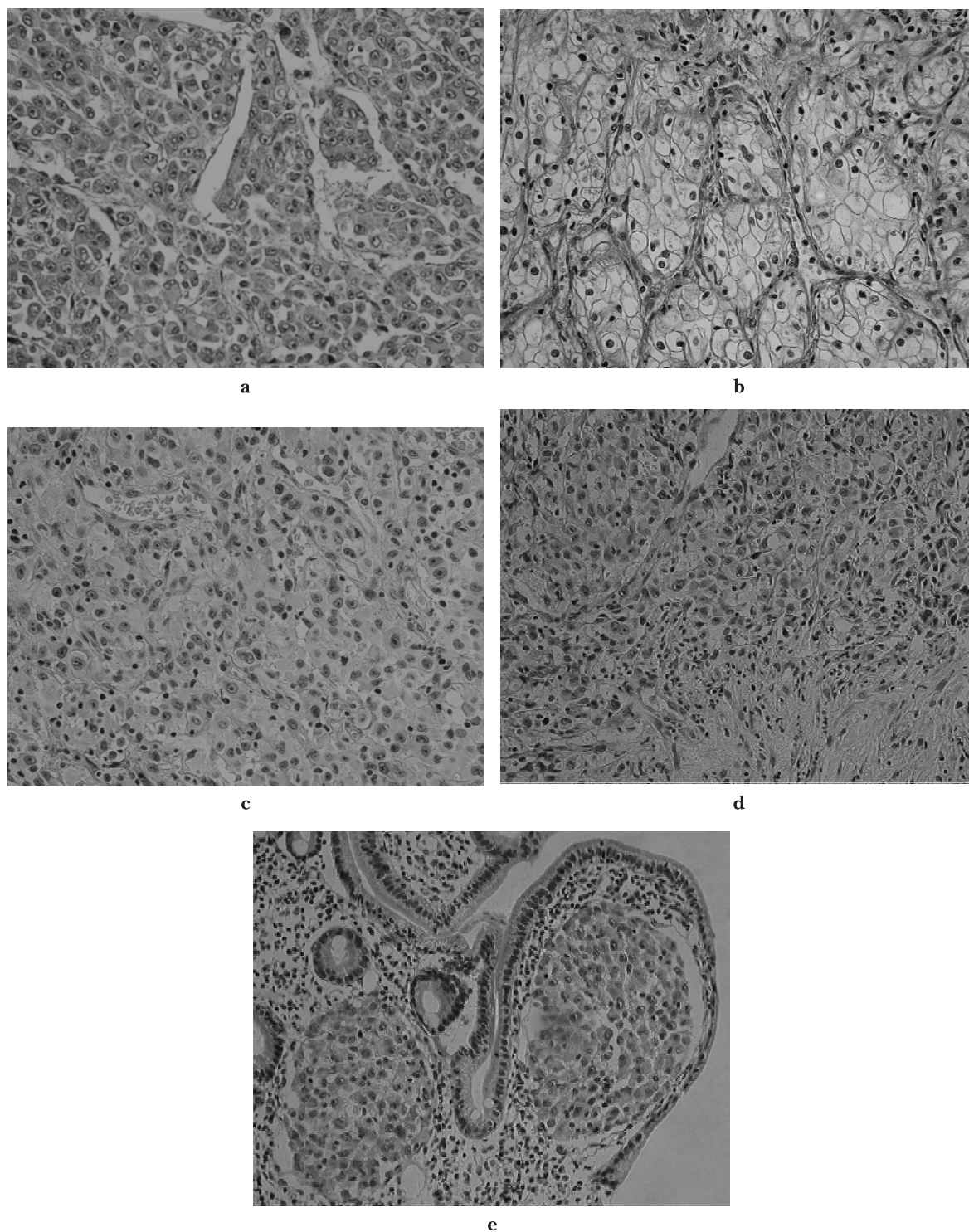


Fig. 2. a) Microscopic findings for unclassified region of the left kidney (HE stain $\times 200$). b) clear cell RCC of the left kidney (HE stain $\times 200$). c) Brain metastasis (HE stain $\times 200$). d) Muscle metastasis (HE stain $\times 200$). e) Jejunal metastasis (HE stain $\times 100$). In each metastatic site, large to medium-sized cylindroid tumor cells with prominent nucleoli are present.

interferon. Oral intake became possible and the patient was able to be discharged, with the intention of continuing immunotherapy as an outpatient. However, patient compliance was poor from this stage, with no attendance for outpatient care. Eventually, interferon therapy was discontinued 9 weeks after starting. Seven weeks after discharge, the patient presented again to the hospital with paraplegia. Although there were no

metastatic lesions in the brain and muscle, multiple lymph node, bone and lung metastases had developed, and intestinal metastasis had relapsed (Fig 1b).

We sought to restart interferon therapy, but this could not be continued because of consciousness disturbance and general debility due to uncontrollable hypercalcemia. The patient died 3 weeks after this second hospital admission.

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和文抄録

インターフェロン α が著効した腎癌骨格筋・小腸転移の 1 例

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腎癌では骨格筋転移や小腸転移は稀であり, これらの転移に対するインターフェロン α による療法の報告は非常に少ない. われわれは腎癌骨格筋・空腸転移の 1 例を経験した. 9 週間のインターフェロン α 療

法により筋肉転移は完全に消失し, 空腸転移も著明に縮小した. しかしながら治療の自己中断により病変の再燃を認め, 癌死の転帰をとった.

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