A Case of Lymph Node Metastasis from Collecting Duct Carcinoma Which Responded to Sunitinib

Introduction and Objective: Collecting duct carcinoma (CDC) of the kidney is a rare and aggressive neoplasm with a poor prognosis. A phase II trial of the platinum-gemcitabine regimen for patients with metastatic CDC demonstrated an objective response rate of 26%, along with a median progression survival and overall survival of 7.1 months and 10.5 months, respectively. Therefore new treatment strategies are needed for advanced CDC.

Materials and Methods: We present a single case in which sunitinib, an oral multitargeted tyrosine kinase inhibitor with antitumor and antiangiogenetic activities, was used as first line therapy to treat lymph node metastasis of CDC after radical right nephrectomy.

Results: The regional lymph node metastasis with partial response was observed following treatment with 5 course of sunitinib at a dosage of 37.5-50mg administered on 4/2 schedule (4 weeks on treatment, 2 weeks off treatment). Furthermore, treatment-related adverse events were manageable consisting of fatigue, diarrhea, hand-foot syndrome, hypertension and hypothyroidism. He remains under close surveillance for clinical response and progression disease.

Conclusion: No unequivocal indications exist for surgical and medical treatment of metastatic CDC. Our study suggests that sunitinib may play an important role inhibiting angiogenesis and other pathways in this tumor. Long-term follow-up studies are essential to establish whether sunitinib is truly effective in this case.