Author’s response to reviews

Title: Management of renal extraskeletal mesenchymal chondrosarcoma

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Response to editorial comment no 1.
Written informed consent for using patient data and any accompanying images was obtain from the patient upon his hospitalization, according to all legal and ethical regulations, both national and international, in accordance to the Declaration of Helsinki. A copy of the written consent is available for review by the Editor of this journal.

Comment no 2
Author contributions: Vitalie Gherman had full access to all the data in the current paper and takes responsibility for the integrity and accuracy of the data.
Study concept and design: VG, CT, IC
Acquisition of data: VDO, DVS, CB, BF
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Responses to reviewer report no 2. (Jens Bedke)

1. In the Abstract: Primary mesenchymal chondrosarcoma of the kidney is an extremely rare malignant tumor. To our best knowledge, only 9 such cases have been reported so far.

In the Background: In the current paper, we report description of the surgical management of a renal MC, an extremely rare condition to our knowledge, with only nine other cases having been previously reported [12-17].

2. As safety and accuracy of percutaneous biopsy was recently reported by Volpe et all [18], we have performed a fine needle aspiration biopsy of this radiologically undetermined renal mass, in order to establish the diagnosis, and to assess the potential role of the neoadjuvant chemotherapy. The pathological examination showed well differentiated, benign appearing cartilaginous tissue, raising the suspicion of a chondrosarcoma, osteosarcoma or another cartilage producing tumor (Figure 2). Within the tumour board of the Cancer Center, the oncologist sustained the idea of neoadjuvant chemotherapy with cisplatin and doxorubicin. Still, the performance status of the patient did not allowed optimal clinical management, as tumour progression was assessed, and surgery was imperative.

Soon after the percutaneous biopsy was done, the general condition of the patient began to worsen, as weight loss was noticed along with a diagnosis of sub-occlusive syndrome. The surgical indication was of a left radical nephrectomy and left hemicolectomy, as further described.

3. Because of its volume, and severely modified loco-regional anatomy, manipulation was difficult and the excision of the tumour in a “non-touch technique”, with the primary ligation of the vascular supply, was virtually impossible. Excision was only possible after the evacuation of the intratumoral content of about 2500 cc of serosanguinous, viscous and gelatinous liquid, using all the available methods to minimize intraperitoneal tumoral spillage (high-power vacuum, hypertonic solutions, protection of the intra-abdominal organs with sterile, watertight materials).

4. He was discharged 10 days after surgery. As the patient had a high risk for recurrence due to the positive surgical margins and tumour aggressiveness, the clinical management consisted of an intensified follow-up algorithm, in accordance with the guidelines and radiation regulations [19, 20]. The first CT performed at two months after the surgery, showed no recurrence or metastasis. CT scan performed at six months after the surgery showed pulmonary metastasis and a massive local relapse (extending from the psoas muscle, encompassing and displacing aorta (Figure 5).

After the consult of the medical oncologist, it was confirmed that the patient had a stage IV tumor and no salvage chemotherapy was appropriate, taking into
considerations his comorbidities and poor performance status

5. The remaining renal parenchyma showed areas of coagulative necrosis; the tumour did not invade the renal pelvis, but it was extended beyond perinephric tissues into Gerota’s fascia, and paranephric fat, with no evidence of infiltration into renal vein (pT4NxM0V0R1). As tumour spread also involved the paranephric fat, surgeons were not able to obtain completely clean surgical margins (R0). The colon and the adrenal were free of tumour. The concluding diagnosis was extrascheletal MC of the kidney.

Discussion.

Nevertheless, since the excision was not performed following the steps of the “non-touch technique” [27], and because tumoral spillage was likely, the role of intraperitoneal chemotherapy [28] should have been assessed, as this method showed encouraging results in other types of cancer.

Our study is very rare and the interdisciplinary consensus panel of the Clinical Municipal Hospital and Ion Chiricuta Comprehensive Cancer Center suggested that the best management is neoadjuvant chemotherapy followed by a wide surgical resection, reported in the current paper.