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Letter to the Editor

Selecting the Most Appropriate Oncological Treatment for Patients with Renal Masses During the COVID-19 Pandemic: Recommendations from a Referral Center

Since the first case of COVID-19 was described in Wuhan in China in late 2019, more than 150 000 individuals have died in this global pandemic according to the World Health Organization (WHO) [1]. In this scenario, different centers worldwide are facing financial issues and dedicating all their resources and health care workers to the treatment of COVID-19 patients. As a consequence, clinical practice not related to pandemic control, such as surgeries and oncological follow-up, have become a challenge for patients and physicians. Therefore, different groups have published recommendations regarding the best approach for oncological patients during the current pandemic [2]. For instance, the recently published European Association of Urology (EAU) Robotic Urology Section guidelines describe the management of different urological cancers and recommend actions to minimize viral infection among oncological patients and health care workers during the COVID-19 pandemic [3].

It has been reported that cancer patients have a 3.5-fold higher risk of COVID-19-related serious adverse events compared with the general population [4]. In response to the current situation, the EAU has set up a Guidelines Office Rapid Response Group (GORRG) with the aim of providing rapid and clear recommendations in facing this new scenario [5]. However, the dilemma still lies in selecting the most appropriate candidates who will benefit from a surgical intervention during the current pandemic. Here we report on some specific actions adopted by a referral center while managing kidney tumors at all stages, especially highgrade cases, in the ongoing COVID-19 situation.

Active surveillance (AS) for small renal masses ($\leq 4 \text{ cm}$) is well described in the literature as a safe strategy with low risk of progression and metastasis [6]. Therefore, during the COVID-19 pandemic, patients with an indication for AS, in the absence of any other issues, should be maintained on this protocol. However, follow-up and treatment plans for patients with masses > 4 cm may be more challenging. Of note, difficulties in defining proper management for patients with large renal masses mainly arise from the limited possibility of predicting how long this pandemic will last and for how long is it safe to postpone surgery for this group.

Previous analyses reported data on delaying treatment for \geq T1b kidney tumors. In a study of 1278 patients with tumors > 4 cm, Mano et al [7] found that a surgical waiting time of < 6 mo was not associated with upstaging, cancerspecific survival, or tumor recurrence. However, a period longer than 6 mo may negatively affect overall survival [5]. Stec and colleagues [8] reported on the impact of surgical delays in a cohort of 722 patients. For a period of up to 6 mo, the authors found no difference in overall survival between the "early" and "late" surgical intervention groups.

In our opinion and experience, surgical treatment should be carefully individualized because some cases do not have a clear approach endorsed by the current guidelines, especially during the current uncertainty during the COVID-19 pandemic. As supported by the GORRG, renal surgery should be postponed by 6 mo when clinical harm (progression, metastasis, loss of renal function) is very unlikely within the next 6-mo period [5]. However, the data available and the level of evidence in the literature regarding delays in surgical treatment for locally advanced kidney cancer are still poor. Therefore, patients with a tumor ≥ 4 cm, stage progression, growth kinetics > 5 mm/yr, or deterioration of their clinical condition should be considered for surgery if possible [9]. In addition, patients with bleeding tumors with a hemodynamic impact, tumors with renal vein and vena cava thrombus, or large tumors causing compression of adjacent organs may be considered as surgical candidates during this period.

In conclusion, the biggest challenge during the current COVID-19 pandemic is to balance the appropriate oncological treatment against the risk of viral infection. We believe that patients suitable for AS should be offered this protocol with telemedicine or telephone follow-up to minimize viral exposure during hospital consultations. Surgical treatment for these patients can be postponed until conditions are favorable. However, for patients with high-risk and locally advanced tumors, such as the ones mentioned in this article, surgery should not be delayed because of a higher risk of tumor progression and life-threatening complications.

Conflicts of interest: The authors have nothing to disclose.

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