A Path to Training in Onconephrology

By Omar Mamlouk, Marco Bonilla, and Shveta Motwani

Over the past few decades, there has been rapid advancement in the care of cancer patients with a steady flow of novel therapies introduced into clinical practice. Accompanying the new therapies are myriad unintended treatment-related effects, some of which have involved the kidneys, electrolytes, acid-base balance, and blood pressure control. There has also been a shift in the mindset of the treating physicians (oncologists and nephrologists) to attempt a pathophysiological understanding and nuanced management of such treatment-related effects rather than binary labeling of drugs into “nephrotoxic” and “non-nephrotoxic” and discontinuation of therapy thought to be nephrotoxic. This evolution in thinking has led to the formation of multidisciplinary teams with nephrologists—onconephrologists—viewed as integral members of the team. Thus, the field implores nephrologists to dig deep and apply principles of renal physiology and pathology to this medically complex patient population.

Becoming an onconephrologist entails either pursuing an onconephrology fellowship within the 2-year nephrology fellowship or completing an additional year of onconephrology clinical or research fellowship.

A career in onconephrology allows ample advantages. Primary drivers for most nephrologists entering this subspecialty are the high complexity and acuity, the cross-disciplinary collaboration in caring for a vulnerable patient population, and the fertile ground for research. Critical to training in onconephrology is the steady-flow referrals of patients with cancer being treated with a wide range of therapies so that the trainee can gain experience in identifying and managing kidney complications of such treatment. In addition, the necessary learning includes collaborating with oncologists to develop a pathophysiological rationale and approaches to treatment that may have limited backing in the form of traditional pathophysiological rationale and approaches to treatment. Therefore, the field implores nephrologists to dig deep and apply principles of renal physiology and pathology to this medically complex patient population.

Cons

• Adequate time to participate in clinical research training

• Financially advantageous to graduate fellowship

• Earlier clinical career in the field upon graduation

• More relevant clinical experience

• Adequate time to participate in scholarly activities and receive clinical research training

• Competitive resume

• Limited involvement in prospective clinical trials

• Limited research opportunities

• Relocation given the limited number of fellowship programs

• Non-accredited fellowship

• Limited research time compared with research fellowship track

6 months of research time during the year of onconephrology fellowship allow for little opportunity to perform highly impactful work. The research projects in such a short time are generally limited to observational studies (mostly retrospective) or review articles. Last, even with the additional time spent gaining expertise and the need for lifelong learning to manage this medically complex population, the reimbursement for onconephrology patients is identical to that of general nephrology patients.

Regardless of the path a trainee takes into onconephrology, it must be accomplished alongside experts in the field. This is especially important given the scarcity of established guidelines on the management of cancer-related kidney diseases that make up onconephrology, thereby stressing the importance of expert opinion. We hope that more trainees will gain interest in this rapidly growing and incredibly gratifying subspecialty within nephrology.

Onconephrology training

Table 1. Advantages and disadvantages of two onconephrology training tracks

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<thead>
<tr>
<th>Onconephrology training</th>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
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<td>• Fewer overall years training</td>
<td>• Limited involvement in prospective clinical trials</td>
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