Title: *Practice Patterns and Perspectives of Indian Oncologists in the Management of Immune Checkpoint Inhibitor–Associated Acute Kidney Injury: A National Case - vignette-Based Survey*

Authors: Akshaya Jayachandran, Syed Mohammad Assad

Affiliation:

Department of Nephrology, Christian Medical College, Vellore, India

Background: Immune checkpoint inhibitor-associated acute kidney injury (ICI-AKI) is an increasingly recognized immune-related adverse event. However, significant uncertainty remains regarding diagnosis, nephrology referral, kidney biopsy, corticosteroid therapy, and immunotherapy rechallenge. We conducted a national survey to evaluate contemporary practice patterns among oncologists in India.

Methods: An anonymous, vignette-based electronic survey was distributed to practicing oncologists across India. The survey assessed demographics, exposure to nephrology services, perceptions of ICI-AKI, diagnostic and therapeutic approaches, biopsy practices, and immunotherapy rechallenge decisions. Four clinical scenarios representing varying severities of suspected or confirmed ICI-AKI were included. Responses were analysed descriptively.

Results: A total of 83 oncologists participated, including 36 medical oncologists (43.4%), 31 hematologists/hematology-oncologists (37.3%), and 16 radiation oncologists (19.3%). Most respondents had fewer than 10 years of independent practice (73.5%). While nephrology services were available to most participants, only 30% reported regular exposure to nephrologists or dedicated onconephrology services, with approximately 70% reporting limited nephrology interaction in routine ICI-AKI management. Overall, 84% believed ICI-AKI is underdiagnosed and 72% felt kidney biopsy is underutilized. In a vignette involving mild creatinine elevation during pembrolizumab therapy, 82% would seek nephrology consultation and 86% would discontinue concomitant proton pump inhibitor therapy, whereas only 11% would initiate corticosteroids. In severe AKI, 64% favoured immediate corticosteroid therapy and 42% would pursue kidney biopsy before treatment. Following biopsy-confirmed acute interstitial nephritis with complete renal recovery, 58% would consider immunotherapy rechallenge; however, only 17% would rechallenge after a prior dialysis-requiring episode. Severity of prior AKI, tumour response, and biopsy findings were the strongest determinants of rechallenge decisions.

Conclusions: There is a considerable variability among Indian oncologists in the evaluation and management of ICI-AKI. Limited nephrology exposure, uncertainty regarding biopsy utilization, and divergent rechallenge practices highlight important opportunities for improvement in quality of management, onconephrology education, and prospective research in this rapidly evolving field.