Adverse effects of nephrectomy

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Dear Editor,

We read the interesting paper by Mavinkurve-Groothuis et al. in *Pediatric Nephrology* [1]. The authors compared renal-injury markers of surviving patients who underwent nephrectomy for unilateral Wilms tumor (UWT) with a matched group of patients who underwent nephrectomy for nononcological causes. Renal injury signs were found in 54 % of patients who underwent nephrectomy for nononcological causes and in 23 % of UWT survivors after a follow-up of 15 years ($p=0.004$).

We do agree that the prevalence of “progressive” renal injury in UWT survivors may be underestimated. We previously reported that the mean $\pm$ standard deviation (SD) estimated glomerular filtration rate (eGFR) in UWT survivors decreases significantly with age (88.1 ± 22.6 ml/min/1.73 m² during the third decade after surgery and 66.6 ± 15.6 ml/min/1.73 m² during the fifth decade after surgery ($p=0.02$) (reference 18 in the article). Similarly, Kenny et al. reported that UWT survivors >50 years presented an association between nephrectomy and blood hypertension that was not present in the same cohort of patients at a median age of 29 years [2]. These findings are relevant because population studies indicate that even mild-to-moderate renal injury is associated with increased morbidity and mortality risks [3]. Indeed, recent studies indicate that kidney donors present at long-term fol-

low-up an increased risk for cardiovascular disease, end-stage renal disease, and overall mortality [4, 5].

The adverse effects of nephrectomy seem to outweigh the reported adverse effects of nephron-sparing surgery for treating UWT. The hope is that a conservative surgical approach, when feasible, may prevent renal injury.

Compliance with ethical standards

Conflict of interest All the authors state that there are no direct or indirect commercial financial incentive associated with publishing present work.

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