

Table 3. Causes of RTA

RTA	Category	Disease processes
RTA-1	Idiopathic	
	Hereditary	
	Secondary	Autoimmune disorders: Sjogren's syndrome; Rheumatoid arthritis; Lupus
		Medications: Ifosfamide; Amphotericin B; Lithium
		Nephrocalcinosis/hypercalciuria: vitamin D intoxication; primary hyperparathyroidism
		Toxins: toluene
		Sickle cell anemia
Other kidney disorders: renal medullary cystic disease; obstructive nephropathy		
RTA-2	Idiopathic	
	Hereditary	Cystinosis; Wilson's disease
	Secondary	Multiple myeloma
		Amyloidosis
		Medications: Ifosfamide; Tenofovir; Carbonic anhydrase inhibitors
		Toxins: lead; Cadmium
		Vitamin D deficiency
		Chronic transplant rejection
RTA-4	Hereditary	Pseudohypoaldosteronism type 1
	Adrenal insufficiency	Addison's disease; Congenital adrenal hyperplasia
	Hyporeninemic hypoaldosteronism	Diabetic nephropathy
		HIV/AIDS
		Medications: NSAIDs; cyclosporine; trimethoprim; pentamidine
	Hyper-reninemic hypoaldosteronism	ACE-I; ARB; heparin
Aldosterone resistance	Chronic interstitial nephritis	
	Medications: ENAC inhibitor (Amiloride); Aldosterone-receptor inhibitors (Spironolactone)	