Table 2. Differential diagnosis of NG metabolic acidosis

Clinical process		**Note**
Medications	CaCl	HCO3 loss from GI tract
	Acetazolamide	Increase renal HCO3 loss
	Amiloride	Decrease renal acid excretion
Toxins: Toluene		Impair renal acid excretion (6)
Diarrhea		Loss of NaHCO3 from GI tract, with retention of NaCl from kidney to preserve intravascular volume
Pancreatic fistula		
ileostomy		
Renal tubular acidosis(RTA)		Loss of NaHCO3 in type II RTA and secondary NaCl retention. Impaired renal acid excretion in type I & IV RTA
Chronic kidney disease (CKD)		Decreased renal H+ excretion and sulfate reabsorption
Ureteral diversion/fistula		Urine from the ureter is diverted to the sigmoid colon, urinary Cl- is absorbed by the colonic mucosa in exchange for HCO3-, thus increases the loss of HCO3- from GI tract
Others	Dilutional	Effect is less from the degree of volume expension, due to compensatory effect from intracellular and bone buffers
	TPN	Extra chloride (Cl), from NH_4Cl or amino-acid chloride
	Diabetic ketoacidosis	Typically following insulin therapy with excretion of ketoacids