

30th March 2022

Renal Indices

The Section of Chemical Pathology, Department of Pathology & Laboratory Medicine, is pleased to announce the introduction of six new tests/ biochemical indices. Decisions based on these biochemical indices using several urinary and serum markers may provide aid in the evaluation of electrolyte disorders, tubular function, metabolic bone disorders and differentiating between prerenal, renal, and post renal aetiologies. These tests will support clinical decision making in many specialities.

S#	Test Description & Mnemonic	Billing code	Test Charges (PKR)	Sample requirement	Reporting Turnaround Time	Clinical Utility
1	Fractional Excretion of Potassium, FEK	0163690	3300	Random urine and 3-5 cc blood sample	Monday to Saturday, reporting next day	Is useful for determining the cause for hyper- or hypokalaemia. Renal losses of K ⁺ may occur during the diuretic (recovery) phase of acute tubular necrosis, during administration of non-potassium sparing diuretic therapy, and during states of excess mineralocorticoid or glucocorticoid
2	Trans-Tubular Potassium Gradient, TTKG	0163691	5500	Random urine and 3-5 cc blood sample	Monday to Saturday, reporting next day	It is an index reflecting the conservation of potassium in the cortical collecting ducts of the kidneys. It is useful in diagnosing the causes of hyperkalaemia or hypokalaemia

3	Urine Anion Gap, UAG	0163692	2750	Random urine sample	Monday to Saturday, reporting next day	It represents an indirect index of urinary ammonium excretion in patients with hyperchloremic metabolic acidosis
4	Spot Urine Calcium to Creatinine Ratio, SUCCR	0163694	1900	Random urine sample	Monday to Saturday, reporting next day	It is used to screen for hypercalciuria. Increased urinary excretion of calcium accompanies hyperparathyroidism, vitamin D intoxication, metastasis from prostatic cancer, and following calcium supplementation
5	Tubular Phosphate Reabsorption to the Glomerular Filtration Rate, TmP/GFR	0163044	2950	Random urine and 3-5 cc blood sample	Monday to Saturday, reporting next day	Is used to evaluate renal phosphate transport. It is useful in assessing renal reabsorption of phosphate in a variety of pathological conditions associated with hypophosphatemia
6	Fractional Excretion of Calcium, FECA	0163689	3300	24hrs urine & 3-5 cc blood sample	Monday to Saturday, reporting next day	Widely used as a measure for differentiating patients with familial hypercalcaemic hypocalciuria from those with Primary hyperparathyroidism