

# THE AGA KHAN UNIVERSITY HOSPITAL CLINICAL LABORATORIES

## UPDATE Fractional Excretion of Potassium (FeK)

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### INTRODUCTION:

Fractional Excretion of Potassium (FeK) is useful for determining the cause for hyper- or hypokalemia. The kidneys provide the most important regulation of K<sup>+</sup>. The proximal tubules reabsorb almost all the filtered K<sup>+</sup>. Under the influence of aldosterone, the remaining K<sup>+</sup> can then be secreted into the urine in exchange for sodium in both the collecting ducts and the distal tubules. Thus, the distal nephron is the principal determinant of urinary K<sup>+</sup> excretion. Decreased excretion of K<sup>+</sup> in acute kidney disease and end-stage kidney failure are common causes of prolonged hyperkalemia. Renal losses of K<sup>+</sup> 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.

### PRINCIPLE:

Urine and serum Potassium is analyzed by ISE (ion selected electrode) method. Urine and serum Creatinine is analyzed by Jaffe Kinetic Methodology.

### SPECIMEN COLLECTION:

- 5-10 ml of random urine specimen.
- 3-5 cc blood in Gel tube is required.

### SCHEDULE:

- Test will be performed daily with next day reporting.

**PLEASE FILE FOR QUICK REFERENCE**