Test Definition: RTRP2

Tubular Reabsorption of Phosphorus, Random Urine and Serum

Reporting Title: Tubular Phosp Reabsorption, Random
Performing Location: Rochester

Specimen Requirements:

Both serum and urine are required.

Specimen Type: Serum
Patient Preparation: Fasting
Collection Container/Tube:
Preferred: Serum gel
Acceptable: Red top
Submission Container/Tube: Plastic vial
Specimen Volume: 0.5 mL
Collection Instructions:
1. Centrifuge and aliquot serum into a plastic vial.
2. Label specimen as serum.

Specimen Type: Urine
Container/Tube: Plastic, 5-mL tube
Specimen Volume: 4 mL
Collection Instructions:
1. Collect a random urine specimen.
2. No preservative.
3. Label specimen as urine.

Specimen Minimum Volume:

Urine: 1 mL; Serum: See Specimen Required

Forms:

If not ordering electronically, complete, print, and send a Renal Diagnostics Test Request (T830) with the specimen.

Specimen Type	Temperature	Time	Special Container
Serum	Frozen (preferred)	7 days	
	Refrigerated	7 days	
Urine	Refrigerated (preferred)	30 days	
	Frozen	14 days	
	Ambient	7 days	

Test Definition: RTRP2

Tubular Reabsorption of Phosphorus, Random Urine and Serum

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
TRA	TRP	Numeric	%	In Process
GFRR	Random TmP/GFR	Numeric	mg/dL	103542-7
CRETR	Creatinine, Random, U	Numeric	mg/dL	2161-8
PHOS	Phosphorus (Inorganic), S **Also used by tests: PHOS**	Numeric	mg/dL	2777-1
ACREA	Creatinine, S **Also used by tests: ACREA**	Numeric	mg/dL	2160-0

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
RTRP	Tubular Phosp Reabsorption, Random			Yes	No
CRETR	Creatinine, Random, U			Yes	No
PHOS	Phosphorus (Inorganic), S			Yes	Yes
ACREA	Creatinine, S			Yes	Yes (Order CRTS1)

CPT Code Information:

82565
82570
84100
84105

Reference Values:

TUBULAR REABSORPTION OF PHOSPHORUS
>80%
(Although, tubular reabsorption of phosphorus levels must be interpreted in light of the prevailing plasma phosphorus and glomerular filtration rate.)

TUBULAR MAXIMUM PHOSPHORUS REABSORPTION/GLOMERULAR FILTRATION RATE (TmP/GFR)
2.6-4.4 mg/dL (0.80-1.35 mmol/L)

PHOSPHORUS (INORGANIC)
Males
1-4 years: 4.3-5.4 mg/dL
5-13 years: 3.7-5.4 mg/dL
14-15 years: 3.5-5.3 mg/dL
16-17 years: 3.1-4.7 mg/dL
> or =18 years: 2.5-4.5 mg/dL
Reference values have not been established for patients that are <12 months of age.
Females
1-7 years: 4.3-5.4 mg/dL
8-13 years: 4.0-5.2 mg/dL
14-15 years: 3.5-4.9 mg/dL
16-17 years: 3.1-4.7 mg/dL
> or =18 years: 2.5-4.5 mg/dL
Reference values have not been established for patients that are <12 months of age.

PHOSPHORUS, Random Urine
No established reference values

Random urine phosphorus may be interpreted in conjunction with serum phosphorus, using both values to calculate fractional excretion of phosphorus.

The calculation for fractional excretion (FE) of phosphorus (P) is
FE(P)= ([P(urine)XCreat(serum)]/[P(serum)XCreat(urine)]) X 100

CREATININE Serum
Males(1)
0-11 months: 0.17-0.42 mg/dL
1-5 years: 0.19-0.49 mg/dL
6-10 years: 0.26-0.61 mg/dL
11-14 years: 0.35-0.86 mg/dL
> or =15 years: 0.74-1.35 mg/dL

Females(1)
0-11 months: 0.17-0.42 mg/dL
1-5 years: 0.19-0.49 mg/dL
6-10 years: 0.26-0.61 mg/dL
11-15 years: 0.35-0.86 mg/dL
> or=16 years: 0.59-1.04 mg/dL

CREATININE, Random Urine
16-326 mg/dL
Reference values have not been established for patients who are less than 18 years of age.