

Patient Name : Mr. SHYAM BIHARI Visit No : CHA250035836
Age/Gender : 78 Y/M Registration ON : 27/Feb/2025 10: 41PM
Lab No : 10133132 Sample Collected ON : 27/Feb/2025 10: 43PM
Referred By : Dr. KGMU Sample Received ON : 27/Feb/2025 11: 15PM
Refer Lab/Hosp : CHARAK NA Report Generated ON : 28/Feb/2025 09: 20AM
Doctor Advice : URINARY FOR NA+/K+,NA+K+,URINE OSMOLALITY (SPOT),OSMOLALITY (SERUM)



| Test Name | Result | Unit | Bio. Ref. Range | Method |
|----------------------------|--------------|--------|-----------------|--------|
| URINARY FOR NA+/ K+ | | | | |
| URINE SODIUM | 89.50 | mmol/l | 40 - 220 | ISE |
| URINE POTASSIUM | 11.41 | mmol/l | 25 -120 | ISE |

| OSMOLALITY (SERUM) | | | | |
|---------------------------|---------------|-----------------|-----------|--|
| OSMOLALITY Serum | 272.70 | ml osmol/kg H2O | 280 - 295 | |

INTERPRETATION:

- Osmolality refers to the osmotic concentration of a fluid. It depends on the number of active ions or molecules in a solution.
- It gives information about a patient's ability to maintain a normal fluid balance status.
- Increased serum (hyperosmolality) levels are seen in renal disease, Congestive heart failure, Dehydration, Diabetes insipidus, Diabetes mellitus/hyperglycemia, hypernatremia.
- Decreased serum (hyposmolality) levels are seen in Hyponatremia, SIADH, and excessive water replacement/overhydration/water intoxication.

| Serum Osmolality | Urine Osmolality | Clinical Significance |
|---------------------|--|---|
| Normal or increased | increased | Fluid volume deficit |
| Decreased | Decreased | Fluid volume excess |
| Normal | Decreased | Increased fluid intake or diuretics |
| Increased or normal | Decreased (with no increase in fluid intake) | Kidneys unable to concentrate urine or lack of ADH (diabetes insipidus) |
| Decreased | Increased | SIADH |

CHARAK

[Checked By]

Print.Date/Time: 28-02-2025 09:55:09

*Patient Identity Has Not Been Verified. Not For Medicolegal



Sham

DR. NISHANT SHARMA DR. SHADAB Dr. SYED SAIF AHMAD
PATHOLOGIST PATHOLOGIST MD (MICROBIOLOGY)

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| Test Name | Result | Unit | Bio. Ref. Range | Method |
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| URINE OSMOLALITY | | | | |
| URINE OSMOLALITY (SPOT) | 246.7 | M osmol/kg | 500 - 800 | Spectrophotometry & ISE |

INTERPRETATION:

| Serum Osmolality | Urine Osmolality | Clinical Significance |
|---------------------|--|---|
| Normal or increased | Increased | Fluid volume deficit |
| Decreased | Decreased | Fluid volume excess |
| Normal | Decreased | Increased fluid intake or diuretics |
| Increased or normal | Decreased (with no increase in fluid intake) | Kidneys unable to concentrate urine or lack of ADH (diabetes insipidus) |
| Decreased | Increased | SIADH |

- Osmolality refers to the osmotic concentration of a fluid. It depends on the number of active ions or molecules in a solution.
- It yields important information about a patient's ability to maintain a normal fluid balance status.
- A urine osmolality test may be done on an early morning urine sample as water depletion during the night should concentrate the urine. The test may also be done using multiple timed sample or on a cumulative sample collected over a 24 hour period.
- Urine osmolality is a more accurate measurement of urine concentration than specific gravity, and urine osmolality can be compared with the serum osmolality to obtain an accurate picture of a patient's fluid balance.
- With restricted fluid intake, urine osmolality should be greater than 800mOsm/Kg. A 24 hour urine osmolality should average between 500 and 800 mOsm/Kg. A random urine osmolality should average 300 and 900 mOsm/Kg.
- Increased urine osmolality (hyperosmolality)** levels are seen in Addison's disease, Dehydration, Diabetes mellitus/hyperglycemia, hypernatremia, Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH).
- Decreased urine osmolality (hypo-osmolality)** levels are seen in Sodium loss due to diuretic use and a low salt diet, Diabetes insipidus, Excessive water replacement/overhydration/water intoxication.

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|-----------------|--------|-------|-----------------|------------|
| NA+K+ | | | | |
| SODIUM Serum | 129.0 | MEq/L | 135 - 155 | ISE Direct |
| POTASSIUM Serum | 3.6 | MEq/L | 3.5 - 5.5 | ISE Direct |

*** End Of Report ***



CHARAK



MC-2491

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