S-H-Y-P-S
NHS York and Scarborough Teaching Hospitals NHS Foundation Trust
Scarborough, Hull and York Pathology Service

Investigation of Polyuria/Suspected Diabetes Insipidus (DI)

- Confirm polyuria (≥3L per day in adults, ≥2L per day in children)
- History to include fluid intake and drug history[$]
    - Consider drugs that may cause a dry mouth and consequent increased fluid intake
- Exclude Chronic Kidney Disease, Diabetes Mellitus and diuretic use
- Request U&E + calcium + TSH as hypokalaemia, hypercalcaemia and hyperthyroidism can cause polyuria and polydipsia
- Consider primary polydipsia if polyuria secondary to polydipsia

[$] Drugs that may be implicated include:
Diuretics
Certain anti-psychotics
Glucocorticoids
Lithium
Anti-histamines
Alcohol
Caffeine

Interpretation of urine osmolality* in relation to polydipsia

- If urine osmolality is >600 mOsmo/kg then DI is unlikely
- If urine osmolality is <600 mOsmo/kg then DI cannot be excluded.
  Contact endocrinologist to ascertain if water deprivation test is indicated.

*Consider asking patient to have nothing to eat or drink from 10pm and then collect early morning urine for osmolality

There is no role for random serum osmolality in the assessment of polyuria