

## **▼ POST GRADUATES ABSTRACTS**

## **PG -24**: ESTIMATION OF URINARY IODINE TO ASSESS THE STATUS OF IODINISATION AND CORRELATING IT WITH THYROID DISESASES

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Background: Urinary iodine excretion is a measure of iodisation. With the advent of Universal Salt Iodisation (USI), a lot of conflicting reports are available that implicate excessive iodisation in both hypo and hyperthyroidism. Urinary iodine reflects iodine status in the given population. Pondicherry population is unique since it is a mixture of urban, semi-urban and rural. Hence, the study was undertaken.

Methodology: Urinary iodine was measured by the state-of-the-art Hplc procedure with electrochemical detection- a highly sensitive and specific analytical procedure. Thyroid hormones were quantitated by automated chemiluminescence method. The sensitivity and specificity of urinary iodine was related to thyroid

hormone levels by keeping the cut-off for the former at 200micrograms per dl.

Results: USI leads to excessive iodisation as exemplified by the mean urinary concentration values for various thyroid pathology including hypothyroidism, hyperthyroidism, nodular goitre, and hyperplastic thyroid nodule.

Conclusion: Mean urinary iodine concentration and its magnitude can be used in providing a preliminary insight into different thyroid pathology. USI contributes to excessive iodine that is equally dangerous like iodine deficiency diseases.

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