

5 Hydroxy Indole Acetic Acid (5-HIAA) (Urine (24hr))

| | |
|------------------------------|---|
| Description | 5-Hydroxy Indole Acetic Acid (5-HIAA) is the principle metabolite of the neurotransmitter serotonin. Markedly increased urine excretion of 5-HIAA is found in carcinoid tumours, which secrete serotonin. Carcinoid tumours often present as the 'carcinoid syndrome' with symptoms of flushing and diarrhoea due to the excess serotonin. |
| Indication | Measurement of 5-HIAA is used in the diagnosis and monitoring of treatment in carcinoid tumours. It is also used as a marker of disease status in patients with unresectable primary tumours as well as metastases, as 5-HIAA levels correspond closely with changes in tumour mass. |
| Additional Info | <p>It is important to be aware of drugs that can affect the results of the test.</p> <p>Drugs that can increase 5-HIAA include: Paracetamol, caffeine, ephedrine or glycerol guaiac late (found in some cough medicines), diazepam, nicotine, reserpine and phenobarbital.</p> <p>Drugs that can decrease 5-HIAA include: Aspirin, ethyl alcohol, imipramine, levodopa, MAO inhibitors, fluoxetine, heparin, isoniazid, methyldopa and tricyclic antidepressants.</p> <p>Patients should talk to their doctor before decreasing or discontinuing any medications.</p> |
| Concurrent Tests | Chromogranin A |
| Dietary Requirements | Patients should not eat foods containing 5-hydroxytryptophan or related metabolites such as bananas, tomatoes, pineapple, avocado, kiwi fruit, plums, walnuts, plantains, pecans or aubergine for 3 days before the test. |
| Interpretation | <p>5-HIAA has a high sensitivity and specificity for the 'carcinoid syndrome'. However, sensitivity is lower in patients with carcinoid tumours but without the carcinoid syndrome. In addition, tumours of the foregut and hindgut rarely secrete serotonin and therefore 5-HIAA.</p> <p>In patients who are being monitored following treatment for carcinoid tumour, decreasing levels of 5-HIAA indicate a response to treatment, while increasing or continued excessive concentrations indicate that the treatment has not been successful.</p> |
| Collection Conditions | 24 hour urine sample is required. Urine should be collected into a bottle with sulphuric acid as a preservative. |
| Frequency of testing | If urine collections are accurately timed, measurement of 5-HIAA excretion should not need to be carried out repeatedly. |