



Patient Details

Ms Sample Report
 Genova Diagnostics Europe Ltd
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Practitioner Details

Genova Diagnostics (Europe)
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 356 West Barnes Lane
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Client ID No: IWX500220
Accession No:
 Patients DOB: 16/07/1973
 Sample Date & Time:
 Date Of Report: 04/11/2010 16:32

Sample Type - Serum	Result	Optimal Range	Reference Range	Units
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Peripheral Thyroid Function



[* Analysis Performed by Genova Diagnostics USA]

Commentary

Wilson's syndrome is a condition of abnormal conversion of T4 into the more active T3 in the peripheral tissue. Significant amounts of the T4 get converted into reverse T3, an almost biologically inactive molecule, which interferes with thyroid binding at the tissue level. Not unlike Type II diabetes, Wilson's syndrome is a problem of tissue resistance as opposed to organ dysfunction. The thyroid gland in Wilson's syndrome is usually functioning normally. In many cases the thyroid hormone tests, such as TSH are normal but patients will exhibit symptoms of thyroid hypofunction. There may be an associated low normal or decreased total T3 and T4 level and an increased reverse T3 level.

Many types of stressors (i.e. starvation diets, pregnancy, environmental pollutants, emotional stress, and multiple drugs) can impair the peripheral conversion of T4 to T3. Selenium is necessary for the optimal conversion of T4 to T3, therefore a deficiency in this mineral could also result in elevated reverse T3 levels.

Adrenal - Thyroid Relationship

Increased levels of the stress hormone cortisol, produced in the adrenal cortex, frequently results in production of inactive reverse T3. Treatment should therefore be orientated towards correcting underlying adrenal dysfunction and normalizing cortisol rhythm. (It is recommended to perform an adrenal stress profile (ASP) test if this is suspected.

Key Guide

- Within Optimal Range
- Outside Optimal Range but within Reference Range
- Outside Reference Range

Reference range: The conventional or standard laboratory normal range designed to identify and diagnose disease states and pathology.

Optimal range: The functional approach, orientated around changes in physiology and not pathology. This results in a tighter range, increasing the ability to detect patients with changes in physiological function.