

17 Hydroxyprogesterone

Synonyms

Clinical Indication

Diagnosis of congenital adrenal hyperplasia (CAH) due to 21-hydroxylase deficiency. Levels may be measured following stimulation with ACTH (Synacthen) in investigation of late onset (or mild) CAH. May also be useful in monitoring response to corticosteroid therapy in CAH due to 21-hydroxylase deficiency.

Part of Profile / See Also

Request Form

Combined Pathology manual request form or ICE request

Availability / Frequency of Analysis

Referred test: Analysed by Biochemistry, Royal London Hospital [8285](#), if specific criteria met.

Turnaround Time

Up to 2 weeks

Patient Preparation

Take blood before emergency administration of corticosteroids and preferably early morning. Samples should not be taken in newborn infants until at least 48 hours after birth and ideally after 92 hours.

In monitoring response to treatment, take blood between 08.00h and 09.00h before initiation of treatment for day and again 2 hours after first dose of corticosteroid.

Blood should be taken basal and at 30 minutes and 60 minutes following Synacthen.

Sample Requirements

Specimen Type

Volume

2 ml

Container



Yellow top (SST) tube



Or Paediatric lithium heparin (orange top Sarstedt tube)



Or Paediatric lithium heparin (pale green top BD Microtainer tube)

Reference Range & Units

Follicular and adult males: 1 – 8.7 nmol/L
 Female luteal: <18 nmol/L
 Pre-pubertal children (6m-15yrs): <15 nmol/L
 Neonatal: <20 nmol/L

Interferences

Interpretation & Clinical

Decision Value (if applicable)

Peak levels following Synacthen: Less than 35 nmol/L excludes CAH, whilst a level greater than 60 nmol/L is consistent with CAH. Levels between 35 and 60 are borderline. An interpretive comment is provided by the referral laboratory.

17 Hydroxyprogesterone should not be measured from a newborn less than 48 hours after birth.

References

User Handbook – Clinical Biochemistry Bart’s Health

Test code

17HP

Lab Handling

Aliquot 500ul (paeds aliquot as much plasma as possible) and store in referrals rack at 4C. Sent daily by courier to Royal London Hospital.



8285

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