



Endomysial Antibodies

Synonyms

Coeliac screen (tTG, tissue transglutaminase, anti-gliadin antibodies – also associated with coeliac disease)

Clinical Indication

Coeliac disease symptoms are diverse but typically include gastrointestinal problems, fatigue, failure to thrive, weight loss and mouth ulcers. Some patients can present with the itchy skin rash dermatitis herpetiformis.

There is an association with other autoimmune diseases such as type-1 diabetes and autoimmune thyroid disease.

The coeliac disease screening test is IgA autoantibodies against tissue transglutaminase (IgA tTG).

Requests for anti-endomysial or anti-gliadin antibodies will be screened for the presence of IgA tTG.

Samples found to be tTG IgA positive or equivocal will be tested for the presence of anti endomysial IgA for confirmation.

Samples that are insufficient for the tTG IgA screen will be tested for endomysial IgA antibodies

Part of Profile / See Also

Coeliac screen (tTG, tissue transglutaminase, anti-gliadin antibodies – also associated with coeliac disease)

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

Carried out 1-2 days after positive coeliac screen

Turnaround Time

5 days

Patient Preparation

To avoid false-negative results, patients should be on a gluten-containing diet for approx. 6 weeks prior to the blood test.

Sample Requirements

Please note a separate sample is required when Immunology tests are requested in addition to Biochemistry tests

Specimen Type

Serum

Volume

2 ml

Container



Yellow top (SST) tube



Or Paediatric Yellow top (SST) tube

Reference Range & Units

Result are reported as Positive, Weak Positive or Negative.

Normal result = Negative

Interferences

Plasma samples, heavily haemolysed or lipaemic samples are not suitable. Negative results may be obtained in coeliac disease patients who are IgA deficient.

Interpretation & Clinical

Decision Value (if applicable)

Low-level tTG IgA positive (7 – 10 U/mL) and endomysial IgA positive: The positive EMA result is consistent with Coeliac Disease

EMA IgA positive with a tTG IgA >10 U/mL: Suggestive of active coeliac disease or poor adherence to gluten-free diet

tTG IgA of 7 – 19 U/mL found to be EMA IgA negative: Higher tTG values would be expected in untreated coeliac disease. Borderline results may occur in patients on a gluten-free diet. Biopsy should be considered if the diagnosis is still in doubt

Please note: These assays should not be considered diagnostic, but should be used in conjunction with all clinical and laboratory findings.

Referral to gastroenterology may be required to confirm coeliac disease.

References

NICE guideline NG20

<https://labtestsonline.org.uk>

Test code

Lab Handling

Aliquot and store at 4-8°C prior to testing and at -20°C or below for up to 1 month after receipt.