

Endomysial antibodies

Template:Checked right|400px|thumb|Endomysial antibodies

Endomysial antibodies (EmA) are very reliable markers of celiac disease (sensitivity 83–95 % and specificity 94–99 %), and are recommended in screening algorithms as a second step indicating histological evidence. Celiac disease is an autoimmune disease and we, therefore, demonstrate the presence of a number of autoantigens, such as the endomysium, which is a connective tissue protein of the smooth muscle, located between myofibrils.

The detection method is immunofluorescent; monkey esophageal muscle was originally used as a substrate, and other substrates, such as umbilical cord muscle, are now being verified. Laboratory technique requires an immunofluorescence microscope, as evaluation of the test is not entirely simple and requires long-term experience. Detection of EmA antibodies should be performed in several dilutions of serum sample from 1:5 (for basic screening) to 1:40 (detection of the disease). Due to the financial complexity of the test, the evaluation is usually performed in only one dilution, most often 1:20.

Antibodies to tissue transglutaminase, which is the endomysium's own chemical substrate, can be determined by a classical ELISA method and therefore more advantageous for routine diagnostics.

Due to the technical and financial demands of the determination of EmA, the possibility of determining antibodies against tissue transglutaminase instead of EmA, resp. sequence of determination of these markers in the celiac screening and diagnostics algorithm, is being discussed.

Links

Sources

- With the permission of the author taken from Template:Quotation

References

- [illegible]