

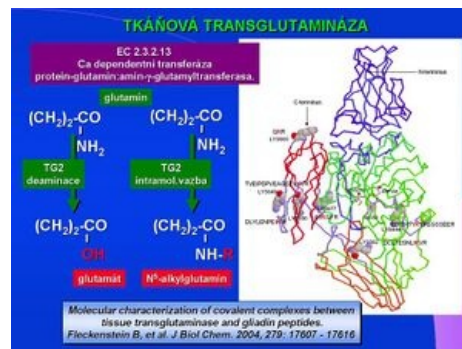
# Protilátky ke tkáňové transglutamináze

**Anti-tTG IgA, IgG** (atTg) jsou protilátky ke tkáňové transglutamináze. Tkáňová transglutamináza má přímý vztah k patogenezi onemocnění a byla popsána jako vlastní, chemický substrát endomysia. Tkáňová transglutamináza (izoenzym transglutamináza II, TG2 - EC 2.3.2.13), je transferázou, systémový název je protein-glutamin:amin- $\gamma$ -glutamyltransferasa. Je to  $\text{Ca}^{2+}$  dependentní enzym katalyzující deaminaci glutaminu na glutamát, rovněž vede ke vzniku intramolekulární vazby glutaminu na další primární amin, např. lysin, a vede k agregaci glutaminových peptidů. Stanovení protilátek ke tkáňové transglutamináze (atTG) má proto rovněž velmi vysokou diagnostickou efektivitu, podobně jako protilátky proti endomysiu (senzitivita 87–97 % a specifita 88–98 %).

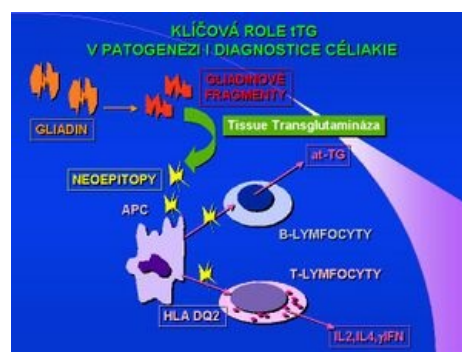
**Stanovení atTG** je prováděno klasickou metodou ELISA, což je pro rutinní diagnostiku technika dostupnější než imunofluorescenční průkaz protilátek proti endomysiu (EmA).

Protilátky atTG lze na rozdíl od EmA stanovovat ve třídě IgA i IgG, což má význam pro nemocné se selektivním deficitem IgA. Metoda byla popsána s použitím antigenu morčete, který je použit ve většině starších souprav. Novější soupravy již používají jako antigen tkáňovou transglutaminázu izolovanou z lidských buněk, z lidských erytrocytů, nebo rekombinantní tTG izolovanou na *E. coli*. Referenční hodnoty se liší u jednotlivých souprav, většinou je pro IgA protilátky uváděna horní hranice normy 10–15 IU/l, některé soupravy definují i tzv. šedou zónu (*gray-zone*) v rozsahu 10–20 IU/l. Stanovení protilátek atTG s lidským rekombinantním antigenem vykazuje nižší falešnou pozitivitu než metody s antigenem morčete. Nejnovější studie porovnávají protilátky třídy IgA a IgG a POCT metodiky stanovení atTG protilátek.

Stanovení protilátek atTG ve třídě IgA je doporučeno jako základní screeningový test pro diagnostiku celiakie.



Tkáňová transglutamináza



Role tTG v patogenezi a diagnostice celiakie

## Odkazy

### Zdroj

- se svolením autora převzato z KOCNA, Petr. *GastroLab : MiniEncyklopedie laboratorních metod v gastroenterologii* [online]. ©2002. Poslední revize 2011-01-08, [cit. 2011-03-04]. <<http://www1.f1.cuni.cz/~kocna/glab/glency1.htm>>.

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