Elastáza 1 ve stolici

Stanovení elastázy-1 (EL-1) ve stolici

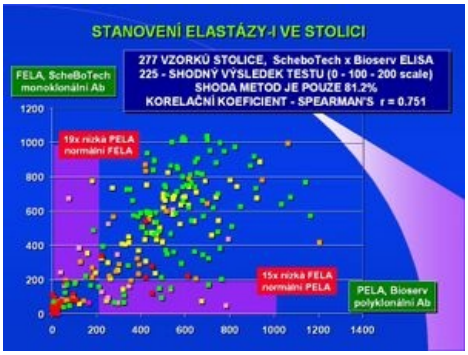
Lidskou pankreatickou elastázu 1 produkují acinární buňky pankreatu. Enzym je součástí **pankreatické šťávy**, která je produkovaná do duodena. Během střevní pasáže není degradována proteinová sekvence enzymu, která je zvolená pro immunochemickou detekci. Stanovení elastázy je proto více diagnosticky přínosná, než chromogenní metody stanovení chymotrypsinu ve stolici, význam nemá ani stanovení lipázy ve stolici. Aktivita lidské pankreatické elastázy 1 ve vzorcích stolice odráží **míru exokrinní pankreatické funkce**. Nejnovější aplikace doporučují stanovení pankreatické elastázy-1 v duodenální šťávě při stimulovaném **funkčním testu**. Klinický význam má stanovení elastázy-1 ve stolici v **diferenciální diagnostice**:

Stanovení pankreatické elastázy-I ve stolici

- malabsorpčního syndromu,
- jako screeningový test onemocnění pankreatu,
- dlouhodobé sledování nemocných s chronickou pankreatitídou.

Laboratorní metoda

Laboratorní metoda je založena na **imunologickém průkazu** ELISA metodou s monoklonální (nebo polyklonální) protilátkou k lidské, pankreatické elastáze. Vzorek stolice je v laboratoři homogenizován v extrakčním nárazníkovém roztoku a po ředění 1:500 dále zpracován běžným ELISA postupem na mikrotitrační destičce s detekcí pomocí POD-streptavidin. Souprava obsahuje 5 kalibračních standardů v rozmezí 0.3–10.0 ng/ml.



Stanovení elastázy-I ve stolici

Referenční hodnoty

Referenční hodnoty jsou **200–500 µg/g stolice**, hraniční pásmo je 100–200 µg/g, závažná pankreatická insuficience je stanovena při hodnotách < 100µg/g stolice. Imunochemické stanovení elastázy-1 není ovlivněno pasáží tlustým střevem, substituční terapií ani jinými faktory, které ovlivňují enzymové stanovení chymotrypsinu ve stolici. Specificita metody je 93 %, senzitivita dosahuje pro těžkou pankreatickou insuficienci hodnoty 100 %, pro střední a lehké formy 87%. Tento test je běžně používán v pediatrii k průkazu cystické fibrózy se specificitou i senzitivitou téměř 100%. Falešná snížená hodnota může být způsobena zředěním (obsahem vody) při průjmu.

Odkazy

Související články

- Akutní pankreatitida (laboratorní diagnostika)
- Pankreatitida chronická (laboratorní diagnostika)
- Dechové testy
- Nepřímé testy exokrinní funkce pankreatu

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.lf1.cuni.cz/~kocna/glab/glency1.htm>.

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