

D-dimer

D-dimers are **the end products of fibrin degradation** stabilized by crosslinks.

Formation

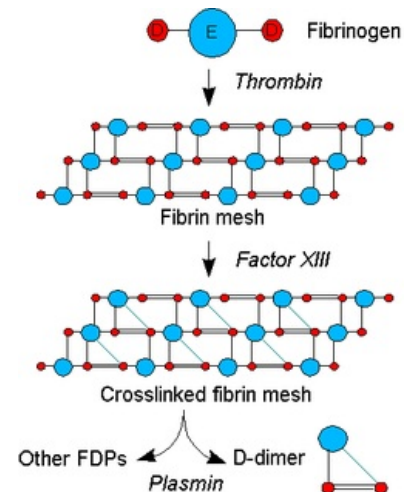
The thrombus, which was created by the process of hemostasis, is then removed by the fibrinolytic system – plasmin splits the high-molecular polymers of fibrin into fragments of different sizes, the so-called **fibrin degradation products (FDP)**. D-dimers are the smallest degradation products.

Their name is derived from the fact that, in addition to one E subunit, they also contain two D subunits.

Use

D-dimers serve as markers of thromboembolic conditions, which are characterized by increased fibrinolysis and thus an increased concentration of FDP and D-dimers in plasma.

In the diagnosis of deep vein thrombosis, pulmonary embolism a DIC, their determination is important mainly as a **negative predictive factor** – a negative test result significantly reduces the probability that it is thrombosis, on the contrary, a positive test can be a manifestation of various diseases - e.g. extensive infectious inflammation, myocardial infarction , or pregnancy, conditions after surgical operations, etc. (high sensitivity of the test, but relatively low specificity).



Formation of fibrin network from fibrinogen, formation of crosslinks within fibrin, fibrin degradation and formation of D-dimer.

Links

Related articles

- Fibrinolysis
- Trombosis

External links

- <https://cs.wikipedia.org/w/index.php?title=D-dimer&oldid=8334249>