Immune-Coagulopathy

Clotting-Guide
vom Labor zur Diagnose

Description:

In immun-coagulopathies, autoantibodies influence the function of one or more coagulation factors. Depending on the clotting factor inhibited, its residual activity and the strength of the binding, there can be varying degrees of bleeding:

Factor XII, XI: common, after infections; no tendency to bleed
Factor VIII, IX: rare, see text for acquired hemophilia; severe bleeding possible, dependent on residual factor activity
Factor X: very rare; severe bleeding possible, dependent on residual factor activity
Factor V: very rare; severe bleeding possible, dependent on residual factor activity
Factor II: very rare; severe bleeding possible, dependent on residual factor activity
Factor VII: very rare; no? bleeding tendency
Factor XIII: very rare; variable bleeding tendency
Factor VWF: very rare; variable bleeding tendency

Treatment options:

- *Reduction of bleeding tendency:* coagulation factor concentrates are usually ineffective at high inhibitor titres. Therefore, the only option is often rhFVIIa (Novoseven®). Dose 45-90 mcg/kg every 2-4 hours, accordinf to the product information!
- *Prevention of antibody formation:* today almost only steroids and (off-label) rituximab are used as immunosuppression.

Surveillance:

Determination of the activity of the respective coagulation factor
Quantification of inhibitor titer using the Bethesda assay (and modifications thereof).
For questions contact a coagulation specialist.

References:

Thomas L, Laboratory and Diagnosis, 2023, Release 5: https://www.labor-und-diagnose.de/index.html
Parameter catalog of the Clinical Institute for Laboratory Medicine, Med.Univ.Wien and AKH Vienna: https://www.akhwien.at/default.aspx?pid=3982
List of services for clinical chemistry, Univ.Klinikum Ulm: https://www.uniklinik-ulm.de/zentrale-einrichtung-klinische-chemie/leistungskatalog.html