

Disseminated intravascular coagulation (DIC)

● DIC is an acquired syndrome characterised by excessive systemic intravascular activation of coagulation, with no specific site and due to a variety of different causes and origins (ISTH 2001).

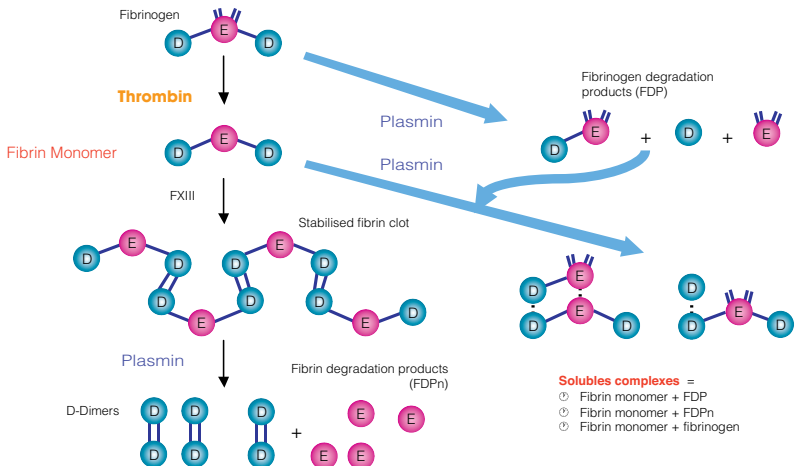
● Diagnosis of DIC is based on clinical criteria (presence of underlying disease or specific medical conditions such as septicaemia, trauma, malignant tumour, etc) and laboratory criteria.

● There are 2 types of DIC:

- **Compensated** or «non-overt» DIC
- **Decompensated** or «overt» DIC

Non-overt DIC is defined as DIC with no signs of haemorrhage or thrombosis. Diagnosis of compensated DIC is based primarily on laboratory criteria.

Overt DIC consists of established, manifest and serious DIC. Diagnosis is based on a combination of clinical signs and different laboratory tests.



Diagnosis of DIC

Clinical diagnosis

Clinical signs of DIC are either thrombotic signs or haemorrhagic signs, or both at the same time.

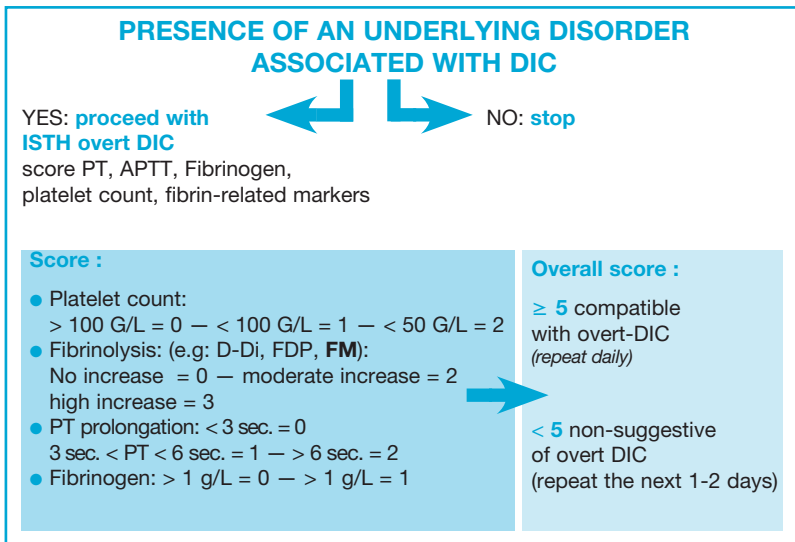
Patients are classified according to 3 different physiological clinical scoring systems.

Laboratory diagnosis

There are no laboratory tests truly specific for DIC.

PT, aPTT and fibrinogen are generally abnormal in acute DIC, but they may be normal in chronic or subacute DIC. These screening tests are thus of limited specificity and sensitivity for diagnosis of DIC. Recent studies show assay of fibrin monomers to be an early marker for DIC.

Determination of DIC defined by the ISTH is based on the presence of underlying disorders and on clotting tests, which allow the identification of patients presenting non-overt and overt DIC.



Bibliography:

- Disseminated Intravascular Coagulation. Levi M, Cate H. ten. NEJM, 1999, 586-592
- Diagnostic Criteria and Laboratory Tests for Disseminated Intravascular Coagulation. Kaneko T., Wada H. J. Clin. Exp. Hematopathol. 2011; 51: 57-76
- Diagnosis of Disseminated Intravascular Coagulation and related consumptive coagulopathies. Mammen EF. Caduceus Medical Publishers Inc., Patterson, NY, USA, 1992
- Laboratory diagnosis of DIC and activated coagulation. Schmaier AH., DIC assessment ABC monography, 1989, 2-18
- Towards Definition, Clinical and Laboratory Criteria, and a Scoring System for Disseminated Intravascular Coagulation (ISTH), Taylor F.B., Toh C.H., Hoots W.K., Wada H., Levi M., Thromb Haemost, 2001; 86: 1327-30
- Diagnostic criteria and laboratory tests for disseminated intravascular coagulation. Kaneko T, Wada H. J. Clin. Exp. Hematopathol 2011; 51: 67-76