

Title	Biology of haemostasis disorders: bleeding time
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Reference	http://www.has-sante.fr/portail/jcms/c_1009982/fr/biologie-des-anomalies-de-lhemostase

Aim

The National Salaried Workers' Health Insurance Fund (CNAMTS) asked HAS to assess the value of the different laboratory tests for haemostasis abnormalities with a view to updating the section in the Nomenclature of Procedures in Laboratory Medicine (NABM) containing the procedures in laboratory medicine for measuring haemostasis disorders (subsection 5-02). One of these tests is the bleeding time (Duke's test, Ivy's incision test or Ivy's 3-point test). The bleeding time (BT), an NABM procedure, is a global test to investigate primary haemostasis *in vivo*. BT consists in measuring the time needed for bleeding to stop after a superficial incision is made in the patient's skin. Historically, the BT was used for preoperative assessment of haemostasis or to investigate haemorrhagic syndrome.

Conclusions and results

According to the different documents analysed, the BT has little or no reproducibility, poor sensitivity and specificity, and lacks predictive value. The BT is an invasive procedure which may leave scars. The BT is not considered suitable for the investigation of primary haemostasis.

There are alternative techniques:

- "preoperative investigation of haemostasis" for the preoperative assessment of the risk of haemorrhage, which is already an NABM procedure;
- "measurement of von Willebrand's factor", "determination of ristocetin activity" and "measurement of factor VIII" for the diagnosis of von Willebrand's disease, which are already NABM procedures;
- "photometric platelet aggregation test" for the assessment of platelet function disorders, which is not at present an NABM procedure but is the subject of a HAS assessment report.

In conclusion, on the basis of the literature identified and analysed, BT is not recommended either for preoperative assessment of the risk of haemorrhage or for the diagnosis of von Willebrand's disease, nor does it have any place in the diagnostic strategy. There are alternatives which are already NABM procedures.

Recommendations

On the basis of the literature identified and analysed, the BT has been shown to be an obsolete procedure which should no longer be used in current practice.

Methods

This assessment is based on a critical analysis of the literature carried out by the Haute Autorité de Santé, and reviewed by experts in haemostasis. It takes into account the arguments of a group of experts assembled by CNAMTS on which CNAMTS based its request. The assessment of this procedure is based on a critical analysis of the literature consisting of 14 documents comprising 10 guidelines, one diagnostic utility study, one position paper, and two systematic reviews, plus the review by three experts in haemostasis.

Written by

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