

HEMATOLOGY / COAGULATION

HEMATOLOGY is the field that includes blood, blood forming tissue and blood-related disorders. A Hematology profile will provide general information on the blood cells (red blood cells, white blood cells, platelets) as well as information about hemoglobin, hematocrit and iron amongst others. This information can be used by your physician to help him diagnose blood disorders such as:

1. **Anemia** characterized by a lack of red blood cells.
2. **Polycythemia** characterized by an excess of red blood cells.
3. **Hematological Malignancies** such as leukemias, lymphomas and multiple myeloma.
4. **Thalassemias**, which are characterized by abnormal hemoglobin production. These disorders are more common in people of Mediterranean descent.

COAGULATION is the process of clotting. Therefore, in the instance that excessive bleeding (hemorrhage) and/or clotting (thrombosis) occurs the physician may order coagulation tests to determine the causative agent. An example of a disease associated with coagulation defects is:

Thrombophilia which is the predisposition of developing blood clots (thrombosis). Thrombophilia is a disorder often attributed to genetic predisposition.

Useful Websites for additional Information:

1. For more information on hematological diseases visit:
http://www.nursingplanet.com/ns/Hematological_Disorders.htm
2. For more information on Thalassemias visit Cooley's Anemia Foundation at:
<http://www.thalassemia.org/index.php>
3. For information on hematologic and coagulation disorders visit:
http://www.nlm.nih.gov/medlineplus/all_healthtopics.html
4. For more information on specific lab tests visit Lab tests online at:
<http://www.labtestsonline.org/understanding/index.html>

HEMATOLOGY / COAGULATION PROFILES

HEMATOLOGY

FBC + 5 part Diff
ESR

ANEMIA

FBC + 5 part Diff
ESR
Iron, TIBC
Ferritin
B12
Folate (RBC)

COAGULATION I

Prothrombin Time
Prothrombin Index
PT ratio
INR INT. NOR. Ratio

COAGULATION II

APTT
Normal Control

THROMBOPHILIA AND COAGULATION

PROTHROMBIN TIME
CONTROL TIME
PROTHROMBIN INDEX
PT RATIO
INR INT.NOR.RATIO
APTT
NORMAL CONTROL
FIBRINOGEN
Protein C
Protein S
Antithrombin III
D-dimer
LUPUS ANTICOAGULANT
dRVVT neat/confirm ratio

THROMBOTIC RISK/MISCARRIAGE

FBC
Coagulation Profile
Antithrombin III
Factor V Leiden gene
Factor II Prothrombin gene
MTHFR gene
Fibrinogen
Lupus Anticoagulant
Protein C
Protein S
Anticardiolipin Abs