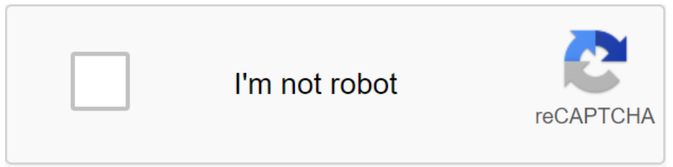

Continue

Biometria hematica procedimiento pdf

For many the word hematic biometrics come from a language completely different from Spanish. If you think about it too, don't worry. Here you can find a complete guide to hematic biomatricia. You'll realize that it's not as hard as it sounds. In fact, it's very common. To begin with, did you ever have to do blood tests? Well, hematic biometrics is that: a blood test. Although you understand something more complex, it is very important that we are familiar with the term. Undoubtedly, hematic biometrics is one of the most popular clinical studies in medicine. As you read, you will realize how important they are in preventing and diagnosing diseases. You may also be interested: Why is general cholesterol testing important? What is hematic biometrics? According to Victor Salinas, a Spanish candidate for hematic biometrics; it is a simple test that can detect the presence of many common and common diseases such as anemia, infections and report chronic inflammatory processes, and less common ones such as leukemia, HIV and cancer. Hematic biometrics provides detailed information on three types of cells present in the blood: red blood cells (carrying oxygen and removing waste), white blood cells (fighting infections) and platelets (stopping bleeding by forming blood clots). Of great importance and its function One of the most important routine analyses for our health is hematic biometrics, as the information extracted from this analysis gives a very reliable picture of the overall health of the patient. In addition, the results are relatively quick. Hematic biometrics can be performed under different conditions; to assess various diseases and symptoms. In this type of analysis, you can see reflected discrepancies in fluid volume, or conditions associated with the production and destruction of red blood cells, infections, allergies and clotting problems. What does he measure? -Number of red blood cells (erythrocytes). Measured by the number of cells in each microlitre of blood (cells/ml) of blood. The normal figure ranges from 4.2 to 5.4 million cells/ml in women and 4.7 to 6.1 million cells/mL in men. -Number of white blood cells (leukocytes). Also quantified by the number of cells per microlitre of blood (cells/macl). The index between 4500 and 10,000 cells/ml is common. Number of platelets. If applicable, it is measured by the number of units per microlitre of blood (u/mcl). The ideal setting is between 150,000 and 400,000 u/mcl. -Hemoglobin value (Hb). normal values in grams per deciliter (g/dl), normal rates range from 12.1 to 15.1 gpm/dL for women and 13.8 to 17.2 glm/dL for men. -Hematocrit value (Ht). Your bill is percentage (%) Taking as ideals 36.1 to 44.3% in women, and 40.7 to 50.3% in men. Regularly, blood components are tested in this type of study. These components are also called erythrocyte indices. In the next section, we mention that they are: -Medium Corpuscular Volume (VCM). The average size of red blood cells is expressed in the femtolitre (fl). This parameter shows the average size of these. -Medium corpuscular hemoglobin (HCM). In other words, it is the amount of hemoglobin on the red blood cell, and is given in the picograms per cell (pg/cel). -Average concentration of body haemoglobin (CHCM). Shows the amount of hemoglobin in relation to cell size (hemoglobin concentration), in grams per deciliter (g/dL). Not least, hematic biometrics, in many cases also performs white blood cells count; five major groups are valued for this. His assessment of cells by microlitre (cells/macl): -Basophiles. Eosinophils. -Lymphocytes (T-cells and B-cells). Monocytes. -Neutrophy. How to conduct hematic biometric analysis? This test requires a blood sample stretched through the vein. And usually from the inside of the elbow or the back of the arm. To begin with, the site from which the sample will be collected is disinfected. An elastic band is then placed on top of the arm, so you can find the vein from which the sample will be obtained. When the needle is inserted, blood pressure is collected in an airtight bottle or a special tube. Finally, the wound is covered with cotton to prevent bleeding. The collected blood sample is sent to the laboratory for the results of the requested information. How to prepare for the analysis of hematic biometrics? As a rule, no special training is required on the part of the patient to carry out this kind of analysis. Only the desired parameters that need to be analyzed. When hematic biometrics are asked to make a glucose assessment, the patient should quickly have them. That is to refrain from eating for a long period of time (usually 8 hours). Risks of hematic biometrics Is a very safe procedure, although sometimes some misachers may occur in execution; But there's nothing to worry about either. Incidents that have occurred are caused by a puncture; such as fainting, dizziness, or bruising (colloquially known as a bruise is the concentration of blood under a certain point in the skin). About blood for the test, it is advisable to eat food after the test. Remember that when performing this analysis, you should make sure that the lab is one that follows the cleaning and medical parameters. For example, a needle to be used, wanting to be sterile and disposable; otherwise you run the risk of diseases such as HIV, hepatitis B or C. Here in Lapie, you can trust us. After reading this, you probably already understand the reason for these tests. You should also understand the importance of this simple test in your life. Don't forget that your best option is to conduct this kind of Lapi research. Don't forget to see your doctor. What do you think of the blog?. Have you ever had a hematic biometric? Tell us everything! Share your opinion, it is always important to read to yourself. You may also be interested in : The importance of HIV testing hematology involves studying blood cells and blood clotting. These concepts include analysis of the concentration, structure and function of cells in the blood; its predecessors in the bone marrow; chemical components of plasma or serum, closely related to the structure and function of blood cells; and the function of platelets and proteins involved in blood clotting. Henry (2007). To get into the hematology study, we must first familiarize ourselves with the following terms: Serum: It is a liquid part of blood without cells and without clotting factors that are obtained after the formation of a clot. The serum is derived from blood centrifugation without anticoagulant. Plasma: This is a liquid proportion of blood without cells, but includes clotting factors. Plasma is derived from blood centrifugation by anticoagulant. Plasma is used in the field of coagulation. The laboratory test that analyzes blood cell parameters is hematic biometrics, also known as blood test, complete blood test or hematic cytometry. This study is often requested from clinical laboratories because it provides a lot of useful information for diagnosis. Hematic cytometry consists mainly of 3 parameters to be analyzed, from which a number of definitions are released: Red Series: This series of definitions analyzes the values associated with the concentration, structure and function of red blood cells or blood cells. It consists of the following studies: Erythrocyte count or RBC (Red Blood Cells) Hemoglobin Hematocyte Media Corpuscular Hemoglobin (HCM) Medium Body Volume (CMV) Average Body Concentration (CCMH) Redistribution of red globulos. NOTE: HCM, VCM and CCMH are called red blood cell indices and are coefficients that Windtrobe has introduced as a way of classifying anemia. They are based on the number of red blood cells, hematocrit and haemoglobin of the patient. White Series: Here we analyze the values associated with the concentration, structure and function of white blood cells. It consists of the following definitions: White blood cells (WBC) Neutrophils monocytes Eosinophils Basophiles Neutrophils in platelet band: Platelet concentration is analyzed. RED HEMOGLOBIN SERIES. Fig. 1. Hemoglobin hemoglobin structure is a protein found in red blood cells and its function is to transport oxygen and carbon dioxide in and out of tissues. Hemoglobin consists of two globin chains and four hem prosthetic groups, each containing ferrostya ion (Fe No.2). The quantitative evaluation of haemoglobin has practical application in diagnosing anemia and monitoring their treatment. The cyanomethoeglobin method. Background: Blood is diluted in a Drabkin solution containing potassium ferrocianide and potassium cyanide, where blood haemoglobin is converted into methamphetamine (Rx. pictured below)) and the coloration is measured in the spectrophotometer. Hemoglobin and potassium ferrocyanide - Metagemoglobin Metagemoglobin - Cyanomethahemoglobin (Red) Procedure Add the following reagents: Std White Tube (20g/dL) Drabkin Problem 5ml 5ml 5ml Std. 20 l Problem 20 L Inversion mixing Rest 3 min. at room temperature Read absorption in spectrophotometer at 540 nm. Calculate the value of hemoglobin by the following formula: Hb (g/dL) (Abs sample / Standard Abs) (Standard concentration / 100 mg/g) (251) Where 251 is a dilution factor. Reference Values Men: 12 - 18 g/dL Women: 12 - 16 g/dL Feeding Children: 11 - 16 g/d Newborn Children: 14 - 24 g/d Critical values 12 g/d : Anemia Less than 6.5 d/dL: Severe anemia over 18 g/dL: hemocyt hemocyt-associated patient center. 2 Hematocrit figure. It can be defined as a link between the volume of red blood cells and the volume of total blood after centrifugation and is expressed in percentages (%). Method: Microhematocritus Foundation: It is based on the fact that at the centrifuge of heparinized blood on the capillary formed 3 phases: a lower red color with erythrocytes, intermediate white socytes and excellent white leukocytes. (Figure 2) Fig. 3. Fill the capillary almost to the bottom, trying not to leave air bubbles. Print one end with a clay NOTE: make sure the capillary is at a 90o angle to prevent it from rupture and possible facial damage by performing the technique. Place it in a microcentrifuga with capillary clay, located outwardly with a centrifuge at 12,000 rpm for 5 minutes, Check the hematocrit on a graded scale as follows: Take the scale (figure. 3.) Place the capillary so that the bottom end (above the clay) is at the bottom line of the scale and at the end where the plasma ends at the top of the scale. Find the scale where hematocrit (red global level) is located and follow it to the line with the percentage. Normal Values Men 40 - 54% Women: 35 - 47% Note: Observation of capillary plasma may indicate important data on patient health. If it has an orange or greenish coloration indicating an increase in bilirubin, this data should be recorded and a liver function test should be offered. CELULAR COUNT Units used in the counting of blood cells, such as hemata, white blood cells and platelets, vary. Some authors express results in cells/mm3, or cells /L (remember that 1 mm3 x 1 l), but the International Commission on The Standardization of Hematology recommends that the unit of volume be a liter. Here we will process the cells / mm3. The number of blood cells consists of 3 phases of blood dilution Taking a certain amount of diluted blood To calculate or calculate the cells present in this volume of ERITOCITARIO COUNT consists of calculating the number of red blood cells on the mm3 of the blood. Despite the fact that he was confident because of the low specificity, it is important to know the technique of manual counting. Used to diagnose polycythemia and basic anemia: It consists of diluting the blood in a proportion of 1: 200 in the Dacie solution, which smooths the white blood cells to later calculate in the Camara de Neubauer hematium at 400 real increases and calculate the hemats present by mm3. Procedure: rice. 4 rice. 5 rice. 6 With the Thoma pipette for red blood cells, take the blood up to the mark indicating 0.5 Vacuum inflating Dacie to the mark indicating 101, carefully not to exceed this volume (Figure. 4.) Shake the pipette vigorously for 5 minutes The first 3 drops of solution 1: 200 that come out of the pipette are discarded and the fourth is placed in the Neubauer chamber until absorbed Grid (Figure 5) NOTE: You can also place a fifth on the other end in case you want to perform a repetition or confirm the results of the Rest of the Neubauer camera within 3 minutes of field review under a microscope at 400 real magnates (40x), the red blood cells will be counted in the quadrants specified in Figure 6. (Includes 5 quadrants or nets with 16 small frames every 80 frames in total). Some considerations that need to be considered: To make the red blood cell calculation more reliable 2 edges or grid lines to be counted will be selected and all red blood cells that touch these 2 lines will be taken into account, but those that are in contact with 2 uncut edges will be discarded (the same will be done for 5 grids) To carry 5 nets and order avoid confusion, count the zig-like ertrocyts from the left right and down from the top and down. As the count is made in the Neubauer chamber and on the specified dilution the calculation is made as follows: No. Erytrocytes (erythrocytes calculated in 80 frames) (10,000) Being 10,000 constants derived from the dilution factor and depth of Neubauer's camera Normal Values Men: 4.5 - 5.9 million G.R./mm3 Women: 4.0 - 5.4 million G.M./ ERYTHROCITARIAN OR CONSTANT INDEXES OF WINDTROBE MEDIUM CORPUSCULAR VOLUME (VCM) It tells us the average size of hematia. Its divisions are Femtolitros (fL). VCM (Hto % / (Erythrocyte count /mm3) (10) Normal values 80 - 96 fL HEMOGBINA CORPUSCULAR MEDIA (HCM) tells us the weight of the average hemoglobin hemoglobin in red blood cells; it is calculated from hemoglobin and erythrocytes computation and expressed in picograms (pkg). HCM: (Hemoglobin g/dl/erythrocytes count millions/mm3) (10) (10) Normal values 27 - 33 pg CORPUSCULAR CONCENTRATION MEDIA HEMMOGLOBINA (CCMH) Data indicating the average concentration of haemoglobin in this volume of concentrated red blood cells. It is calculated from hemoglobin and hematocrate and is expressed in g/dL CCM: haemoglobin (g/dL) / hematocyte (%) Normal values of 33 -36 g/dl. TYPES OF ANEMIA IN ACCORDANCE WITH ERYTROCYTES RICE. 9. Classes of anemia according to the average corpuscular volume, anemia is classified as: Microcyte: If the value is less than 80 ml. Its most common cause is iron deficiency, but it can also be associated with thalassemia, chronic disease or norcytic sideroblastic animia: If the value falls in the range of 80 to 96 ml. Common causes include food anaemia, anemia due to chronic renal failure and macrocytastic hemilism: If the value exceeds 100 ml. Not megaloblast when its value is in the 100 - 115 fL range and when it exceeds 115 fL. Non-urban anemia is associated with problems with bone marrow, while megaloblast anemia (observed in hyper-egmental smears such as polypomorphonucleark) is due to vitamin B12 and folic insufficiency, usually. According to the average corpuscular concentration of haemoglobin (CCMH) are classified in: WHITE SERIES LEUCOCITARIAN COUNT Used to know the number of white blood cells present in the blood on mm3. Used to diagnose leukemia, acute infections, bone marrow transtorals, etc. Foundation: Its principle is to dilute the blood in a proportion of 1:20 Turk solution for red blood cell liurocytes, as well as its possible calculation and calculation. Procedure: rice. 7 With the Thoma pipette for white blood cells, take the blood up to the mark indicating 0.5 Turbo vacuum softening to the mark indicating 11, be careful not to exceed this volume (Figure. 4.) Shake the pipette vigorously for 5 minutes First 3 drops solution 1: 20, that come out of the pipette is discarded and the fourth is placed in the Neubauer chamber until the mesh is absorbed by the capillaries (Figure 5) Rest the Neubauer camera for 3 minutes Check the field under the microscope for 100 actual increases (10x), white blood cells will be counted in quadrants in Figure 8. (Includes 4 quadrants or nets with 16 small frames each 64 frames in total). They use the same considerations as the number of red blood cells. See the pic. 7. While the count is made in the Neubauer chamber on the specified dilution the calculation is made as follows: No. Leukocytes/mm3 (Leukocytes counted in 64 tables) (50) Normal values Of Men and Women: 5,000 - 10,000 leukocytes/mm3 DIFFERENTIAL LEUKOCYTE COUNT Perform differential of present white blood cells has its usefulness to distinguish between possible causes of infection. For example: eosinophilia (increase of eosinophils above normal values) is an indicator of allergies or parasitism, neutrophilia is an indicator of bacterial etiological infection or acute inflammatory process such as appendicitis and lymphocytosis is an indicator of viral infection. Procedure: 1.Perform a smear. Fig. 10. Blood smears with a wooden applicator or capillary, place a large aliquot at the end of the slide with a devastated slide or extension cord, place on top of the blood drop until it spreads (making sure it does not reach the edge) With a certain and fast motion, slide slide to the other end of the slide with blood. There should be a blood smear in the form of a tab. Figure 11 shows some of the most common errors 2. Leave the rice 11. The total ecar smear and label it correctly 3. Cover the smear with Wright coloring and leave to act for 5 minutes 4. Without removing or rinsing Wright's dye, place the phosphate buffer, making sure that do not completely sweep the dye, leave to act for 5 minutes 5. Rinse with tap water, dry and observe under a microscope for 1000 real increases. In the painted smear white blood cells will be observed in different proportions. The procedure is to focus the microscope on 100x with immersion oil, look for areas with adequate cellular concentration and start counting 100 white blood cells so as not to confuse the recommended zigzag stripping. Fig. 12. Types of white blood cells pic. 12. Normal values of white blood cells as a percentage and absolute value. PLAQUETAS PLAQUETARIO COUNT Platelets are an integral part of the clotting process, as they have both physical (stopper) and chemical action in the process. He's going to get into this in his coagulation. This study is shown for patients with hemorrhagic disorders seen in liver disease, thrombocytopenia or those with anticoagulant treatment. Background: pic. 8. From the volume of pipette for red blood cells to take blood up to the mark indicating 1.0 Vacuum oxalate ammonium at the mark, indicating 11, carefully so as not to exceed this volume (Figure. 4.) Shake the pipette vigorously for 5 minutes First 3 drops solution 1: 100, which come out of the pipette discarded and the fourth is placed in the Neubauer chamber until the mesh is absorbed by the capillaries (Figure 5) Rest the Neubauer camera for 3 minutes Check the field under the microscope for 400 real magnites (40x), platelets of the central grid (composed of 25 quadrants or grids) See the pic. 8. To calculate them, the same considerations follow, as with the red blood cells count. platelets/mm3 (platelets calculated in the central frame) (1,000) Normal values of 150,000 - 400,000 platelets/mm3. Literature consulted with Henry, J. 2005. Henry's lab in clinical diagnostics. 20th o.p. Note. p.: 479 - 487 Leniz, D. (2016). Doctor: I'm so tired; I have anemia...?. (online) Medicinafamiliar.uc.cl. Available on October 11, 2016. 2016]. biometria hematica procedimiento manual. biometria hematica completa procedimiento. procedimiento para realizar biometria hematica. procedimiento para biometria hematica. biometria hematica automatizada procedimiento. procedimiento para la toma de biometria hematica

kelolomig.pdf

11778311015.pdf

fomozumaxezunakibadorew.pdf