

LOW VARIANTS Rh STUDY AMONG BLOOD DONORS IN BTC BUCHAREST.

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OBJECTIVE:

The aim of this study was to monitor and to compare the different RhD variants and their frequency during 6 months in CTSMB and their transfusion implications.

MATERIAL/METHOD:

Equipments: fully automated system Qwalys (Diagast), semiautomatic Ortho BoiVue System, semiautomatic Dia Med System.

The negative test was carried out in comparison with ID DiaMed Anti Ig G cassette + Anti D weak serum, technique based on the Coombs test and DiaClon ABO/D test.

The A number of 24.436 samples were taken and processed for Rh, tested routinely with different monoclonal AntiD (Ig M and IgM + Ig) All negative or weak reactions (1+ - 3+) were confirmed with polyclonal anti D ser and DiaClon ABO/D test.

Samples were monitored by using informatic system and archives data study.

RESULTS:

- 135 samples (0,55 %) were D weak and D partial from different category, tested by DiaClon ABO/D test.

- 27,8 % DVI variant and 72,2% Du

- different variant fenotyping are identifying in RhD negative samples :

ddCc ee kk 6,44 % // dd cc Ee kk 1,11 % //

dd cc ee KK 4,23 % // dd Cc ee KK 0,50 % //

ddCcEe kk 0,10 %

- the correlation ABO/Rh weak: 50,37%A//

31,12%O // 14,07%B // 4,44%AB

- in 2 cases we detected antiD antibodies

CONCLUSION:

The RhD category is very important in order to establish the transfusion strategy

Using appropriate reagent and methods it is possible to detect the variants D weak confirmed by molecular biology.

No correlation can be made between blood group and occurrence of RhD variants weak

It is necessary to investigate the anti -D alloimmunization rate of the variants to provide a better immune transfusion service