Casuistic of related Blood Donations incidents in HPFF Blood Department

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Background Related blood donations incidents (RBDI) have to be reported to the Portuguese Haemovigilance Blood Group since last year. In our department we have a manual system of incidents registration since 2006. We understand how is important the analysis of this data to prevent future incidents.

Aims We want in some way to share our results aimed a better prevention of this incidents.

Methods Data of RBDI between March of 2006 and December of 2009. This register include date, ID, age, sex, weight, time of incidents in relation to donation, donation status (first-time vs. repeat), type of incidents, the time window between last meal and donation. Measures to ease RBDI, past donor history and haemoglobin value before donation (g/dl).

Results Between March of 2006 and December of 2009 we have registered 122 (0.60%) RBDI, in a total of 20067 allogeneic donations, 68.58% donations from men and 31.42% from women. RBDI were 70 in men (0.50% of male donations) and 52 in women (0.82% of female donations). The age of studied donors ranged between 19 and 62 years old with an average of 32.21 ears (19-30 - 34.43%; 31-40 - 25.4%; 41-50 - 16.4%; 50-62 - 13.1%). The average of weight was 70.1 Kilos. We found 96.2% of early RBDI (< 1h) and 3.8% were late (> 1h). RBDI was verified in 20 first time donors, 61 in donors who have donated less than 5 times and 41 in donors with more than 5 donations. What concern to past donor history 18 (14.75%) of blood donors that had RBDI tell us that they already have at least one BDI in past blood donations. We had to interrupted blood donation in 4 (3.27%) occasions. Hb average was 14.29 g/dl. In the first 6 months of the year RBDI are about half of those in the second semester. In most cases the RBDI happened within 10 minutes after initiation of blood donation and the last food intake occurred on average 1.5 hours prior to donation. Signs and symptoms: See graphic below. Most RBDI reversed with simple procedures (Trendelemburg donor position, drinking a sweet juice or water and heating of some biscuits). We didn't find severe RBDI.

Summary/conclusions In conclusion we can say that in our study most frequent RBDI were non-severe (vasovagal reaction), RBDI are few (~1/200 donations). RBDI were more frequent in young people. Early RBDI are more frequent than late. It seems that women are more likely to have BDI. We have not found a direct relationship between the level of Hb and RBDI. We found a relationship between the donations and the seasons, and in the warmer seasons there is a greater tendency to be RBDI. Probably in future we have to take steps to prevent RBDI.