

FETAL MATERNAL IMMUNIZATION AGAINST HLA ANTIGENS IN WOMEN OF A PARAGUAYAN POPULATION PRELIMINARY RESULTS

Fernanda Prieto^{1,2}, Claudia Cabañas^{1,2}, Verónica Villagra^{1,2}, Sonia Figueredo^{1,2}, Robert C. Scott³.

¹Public Health Central Laboratory (LCSP), Asunción, PARAGUAY; ²Consejo Nacional de Ciencia y Tecnología (CONACYT), Asunción, PARAGUAY; ³UPMC Pinnacle, Harrisburg, PA.

OBJETIVES

Evaluate the impact of pregnancy on HLA alloimmunization in Paraguayan women using the Luminex Platform.

RESULTS

A total of **319** women meet the inclusion criteria. Average age was **39** years, number of pregnancies ranged between 0 to 10.

A total of 212 women reported being multiparous (≥ 2 pregnancies). HLA antibodies were found in 45% of them. The prevalence of HLA antibodies increased with the number of pregnancies. Table 1.

Number of pregnancies	0	1	2	3	4	≥ 5
Presence of HLA antibodies	3%	16%	40%	45%	46%	55%

Among the immunized group **68%** had HLA Class I antibodies, **67%** had Class II and **34%** had both Class I and II antibodies. No difference was observed between the time since last pregnancy and HLA antibody prevalence.

Evaluating the occurrence of a miscarriage, the effect of a lost pregnancy was not significant. Lastly, 132 multiparous reported one biologic father and 59 more than one. The occurrence of HLA immunization was not significantly different among both groups.

CONCLUSIONS

Our data confirms that HLA alloimmunization is higher in multiparous women. The increasing frequency of alloimmunization with increasing number of pregnancies suggests that each pregnancy may act as an additional immunizing event. Sensitization ranges reported in other studies varies widely. We have found that 45 % off Paraguayan multiparous women are immunized. Since HLA alloimmunization hinders finding a suitable kidney donor, this study proves that among patients in a renal transplant waiting list, multiparous women are in disadvantage. Currently, no extra points are given to immunized patients in Paraguay's kidney allocation system. It is vital to reevaluate this policy.