Oral Presentations

OP-08

Evalutain of Patients with Donor Specific Antibody Positivity Using the Single Antigen Method in a Single Center Study

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Objectives: Antibodies to human leukocyte antigens (HLA) may develop in the blood of recipients due to blood transfusions, rejection after transplantation, pregnancy and abortion. These antibodies are called panel reactive antibody (PRA) because they are generally from common HLA panels in the world. As a result of this tests, patients with antibodies against HLA antigen above 70 % are consireder as hyper sensitized. High sensitization in kidney transplantation patients emerges as a major problem for transplantation. To day, different methods are used to detect them (Flow cytometry, Luminex, ELISA etc.). In the Luminex method we use, multi antigen coated beads tests are applied to detect antibodies. If the test serum contains anti- HLA antibody it will bind to the appropriate HLA molecule.

Materials and Methods: In this study, HLA antibody levels from the same sera samples of a total of 89 patients, 54 women and 35 men, who were prepared for kidney transplantation at Başkent University İstanbul Hospital between 2017 and 2024, were determined by using life codes PRA class ½ identification test and life codes ½ identification tests by Luminex method measured.

Results: As a result of multiple antigen tests, more than 70% sensitization was detected against both class 1 and class 2 antigens of the patients. When the same samples were re-evaluated with the single antigen bead method, it was observed that the desensitization values were considerably reduced compared to the values in the multiple antigen method. However, we observed that the donor-specific HLA antibodies (DSA) mean fluorescence intensity values also decreased to negative or acceptable limits.

Conclusions: Graft damage from alloimmune injury and the reduced access of highly sensitized patients to transplantation are two of the major challenges facing the transplant community. The accurate determination of clinically relevant HLA antibodies and an appropriate interpretation of their impact are essential in addressing these issues. In the detection of HLA antibodies, a single perfect test providing the desirable accuracy, quantitation, sensitivity and specificity does not exist. Consequently, HLA laboratories must incorporate multiple laboratory tests and analyses with information about each individual to ensure that the correct information regarding immunological risk is provided for each patient. In conclusion, in the light of these findings, we believe that the single antigen coated bead method is very useful in determining the risk of DSA in highly sensitized patients.

OP-09

Neutrophils Get All Worked Up When They See the Kidney!

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Neutrophils the immune system's "first responders" who have often been dismissed as simple-minded, fast-acting foot soldiers. Yet these cells can be a nightmare in kidney disease; they are hidden main characters with a surprising range of terrific effects. Recent research reveals that neutrophils don't just swarm into injured tissues and vanish. They actively contribute to kidney injury and even rejection after transplantation, often through NETosis-a dramatic process where they cast out webs of DNA and proteins to trap pathogens, but in the process, they trigger intense local inflammation.

The reality is that neutrophils' enthusiasm for "saving the day" can make things worse for the kidney, driving fibrosis and damage that challenges graft survival. These findings call for a shift in our perspective it is time to rethink neutrophils as critical targets for kidney disease diagnosis and treatment. By harnessing insights into neutrophil behavior, we may open new doors to therapies that preserve kidney function and extend graft life. So, let's give these overlooked cells the attention they deserve, before they do more damage to our transplants.