

GRADE 2 ACUTE CARDIAC REJECTION: SIGNIFICANCE AND COMPARISON IN 1990 AND 2004 INTERNATIONAL SOCIETY FOR HEART AND LUNG TRANSPLANTATION (ISHLT) SCHEMAS

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In revised 2004 ISHLT grading system, grades 1A, 1B and 2 of the previous schema were combined and renamed as grade 1R. In the past, the acute cellular rejection grades 2 and over 2 of the 1990 ISHLT schema were treated with some form of augmented immunosuppression, regardless of the clinical presentation. We assessed 720 biopsies of 78 adult cardiac transplant recipients with respect to the outcome of grade 2 (1990 ISHLT) rejection.

From January 2000 to January 2007, 720 biopsies were performed in 78 cardiac recipients. Biopsies, scored according to 1990 ISHLT grading system were reviewed. The number of biopsies graded as 0, 1A, 1B, 2, 3A and 3B were, 395, 191, 87, 54, 41 and 2, respectively. There was no grade 4 rejection. Fifty four biopsies from 32 patients displayed grade 2 rejection. Of these 32 patients with grade 2, 19 recipients had no change in their treatment schedule, in 7 recipients immunosuppressive levels were augmented; in 2 recipients the immunosuppressive regimen was totally changed. In all these 28 cases, rejection episodes resolved and no grade 2 or higher rejection detected in subsequent biopsies. The remaining 4 recipients in this group with grade 2 rejection, did not have any change in their immunosuppressive regimens, but received pulse corticosteroid treatment later on follow-up, as their rejection episodes showed progression to higher grade rejection on consecutive biopsies.

Conclusion: our data shows that, the majority of the 1990 ISHLT grade 2 rejection episodes seem to be easily manageable, but 12.5% of them may have clinical significance. This group which constitutes 7.4% of all grade 2 rejection episodes in 1990 ISHLT schema and now falls into the category of grade 2R in 2004 ISHLT schema, in our experience, needs careful follow-up.