The impact of pre-transplant red blood cell transfusions in renal allograft rejection


Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
This Technology Assessment evaluated data on the impact of red blood cell transfusions on renal allograft outcomes. There were two key questions with several subparts.

Authors' conclusions
Transfusions generally have beneficial to neutral effects on renal allograft outcomes, and have minimal detrimental effects on the outcomes for renal transplant recipients. There is not much support for the notion that transfusions increase the risk of graft rejection among those receiving transplantation. Although there is evidence that patients receiving pretransplant transfusions have increased levels of sensitization as assessed by PRA, the relationship between the number of pretransplant transfusions and the extent of levels of sensitization is still not established. It should be noted that in some studies, patients who were candidates for transplantation were ultimately not offered the transplant due to high PRA levels. Some other studies did not disclose the number of patients who were ultimately not transplanted due to a high PRA as they focused on the population undergoing transplant. This is a major confounder in these studies. When we examine results based on advancing time periods (before 1942, 1984-1991, and 1992 to the present), the percentage of analyses showing benefit is attenuated in more recently conducted studies. With regard to rejection, the data are more ambiguous with some analyses showing benefit, some showing a neutral effect, and other analyses showing harm, although the number of studies evaluating more recent time periods is quite limited. In essence, the literature base is weak and future research conducted with proper control for confounders, disclosure of baseline characteristics, and use of other good study design techniques is needed to assess the impact of transfusions on allograft and patient survival outcomes in renal transplant recipients.

Final publication URL

Additional data URL

Indexing Status
Subject indexing assigned by CRD

MeSH
Erythrocyte Transfusion; Graft Rejections; Kidney Transplantation

Language Published
English

Country of organisation
United States

English summary
An English language summary is available.

**Address for correspondence**
Center for Outcomes and Evidence Technology Assessment Program, 540 Gaither Road, Rockville, MD 20850, USA.
Email: AHRQTAAP@ahrq.hhs.gov

**AccessionNumber**
32010001645

**Date abstract record published**
15/12/2010