

## **Surgical Resident Rotations on Transplant Surgery**

### **Introduction:**

As has been clearly delineated in recent communications from the ASTS President, Goran Klintmalm, the Resident Review Committee (RRC) for Surgery has recently proposed to eliminate the requirement for a rotation in transplant surgery by declassifying its status as “essential content.” The American Board of Surgery, with input from the Transplant Advisory Council, opposed this proposal on the basis that transplant surgery has great *potential* to be an excellent academic and operative experience for the surgical residents, provided that Transplant Surgery Programs are willing to provide it. A compromise was reached, and the requirement for general surgery residents to rotate on transplant surgery will be left in place for an unspecified period of time (probably 1-2 yrs max) to allow Transplant Surgery programs to improve their resident experience.

The primary basis for the RRC proposal is consistently poor feedback from the residents regarding their experience on transplantation surgery. Essentially, the residents’ concerns are summarized by the following issues: **(i) No educational benefit, (ii) Poor operative experience, (iii) High Service: Education ratio, (iii) Poor interaction with transplant attendings.**

The Program Directors in Transplantation Surgery met on June 11-12, 2007 to discuss several issues pertaining to education in transplant surgery including the resident issue. It was the opinion of the group that elimination of the requirement for residents to rotate on transplant surgery would likely have negative consequences for both the residents (i.e. decreased exposure to a high volume of surgical procedures that are highly relevant to general surgeons including vascular access, vascular surgery anastomoses, hepatobiliary surgery, multiorgan donor procurements, surgery on the cirrhotic patient, etc.); and the future of transplant surgery (i.e. decreased opportunity to recruit residents considering a career in transplantation surgery).

For these reasons the ASTS has decided to take immediate corrective action to improve the national resident experience on Transplantation Surgery rotation. **We encourage all program leadership to begin this process immediately and to carefully monitor its progress.** To help in the process the ASTS curriculum committee and fellowship education committee in collaboration with ASTS leadership have provided the following recommendations and guidelines.

#### **1) Re-evaluate the current role of the resident on your transplant rotation.**

Specifically consider the 4 major issues that summarize the resident’s dissatisfaction with the transplant rotation and how they pertain to your center. Become familiar with RRC guidelines and make sure these are being adhered to on transplant rotations at your institution, especially the 80 hour work week. If work hour violations are occurring, take immediate action to correct this. If residents are currently filling a service role on transplantation at your institution, take immediate action to provide the infrastructure to significantly reduce these duties. Establish a mechanism for obtaining ongoing feedback from the program director for general surgery, and the residents themselves. *Regardless of all other actions taken, ultimately, it will be the opinions of the residents themselves that will determine whether the RRC will continue to include transplant as an essential*

*rotation for general surgery residents. Our traditional concept of the surgical resident's role on a Transplant Surgery service must change.*

**2) Designate a transplant surgical attending to specifically oversee the resident experience on transplant.** (*i.e. Resident education coordinator for transplantation*). Somebody has to implement these changes and ensure that they are actually happening in practice, and that they are achieving the goal of improving the residents' experience. This individual needs to be empowered to make these changes happen and needs to interact closely with the Program Director and educational staff in the Dept. of Surgery. *The resident education coordinator for transplantation will have to work closely with transplant attendings, fellows, physician extenders, nurses, hospital administration, etc. to make sure they are aware of all changes that will need to be implemented and how these changes will influence the currently established role of the resident rotating on the transplant service at your institution.*

**2) Create a structured educational experience with:**

(a) **Written objectives** for each level of training relevant to your program (R1, R2, etc) based on the core competencies (see attachment 1) and the curriculum recommendations of SCORE (Surgical Council on Resident Education) (see attachment 2). *See examples in attachment 3, but recognize that these objectives should be modified to fit your own institutional experience.*

(b) **Defined curriculum** based on the objectives and encompassing (i) essential knowledge, (ii) non-operative clinical experience, (iii) operative experience. *In other words, define the experiences required by each resident during their time on transplant to meet the objectives.*

(c) **Two-way Evaluation.** Create instruments: (i) to evaluate resident performance, and (ii) to obtain ongoing feedback from the residents about their experience on transplant. *This will provide evidence that the objectives are being met and will keep you aware of ongoing concerns voiced by the residents so they can be corrected before they are voiced to the RRC.*

**3) Implement the structured educational experience**

(a) **Written Objectives:** Establish an orientation session for residents starting the rotation and go over the rotation objectives. Seek feedback before, during and after rotation.

(b) **Defined curriculum**

(i) Essential Knowledge: **Establish weekly (*minimum*) interactive teaching sessions with residents and faculty** to cover essentials (*i.e. transplant immunology, rejection, immunosuppression, kidney transplant, liver transplant, end-stage liver disease management, end-stage renal disease management, vascular access*). Maximize access to other useful teaching opportunities and materials (*conferences, lectures, websites, handouts*), but recognize that teaching opportunities during faculty-resident interaction are likely to be the most productive in achieving positive resident feedback.

(ii) Non-operative clinical experience: **Significantly reduce service related activities.** Optimize clinical teaching opportunities outside of the OR (*i.e. scheduled teaching rounds*). Mandate resident attendance in an outpatient clinic (2 half days per week) that is run by a transplant attending surgeon

(iii) Operative experience. **Get the residents into the OR and let them operate.** Develop a system so that a resident is assigned to 100% of surgical procedures performed. Direct residents to cases that are most appropriate for their level of training (*suggestions- attachment 4*), but do not exclude residents from procedures on this basis. Every surgical procedure, or parts of, can provide a valuable teaching opportunity. **Don't ignore the residents in the OR.** Dedicate time during the surgery to actively teach them. **Include residents in all multiorgan donor procurements.** The residents love participating in these and they provide a unique educational opportunity they will not get elsewhere. To avoid 80 hour work week violations, limit the number of procurements per resident per week, or give them time off to ensure that they stay within work hour limitations. Maximize resident exposure to operative experiences that are performed more frequently on your service than on other services, and that meet general surgical resident training requirements i.e. hepatobiliary surgery, vascular access, vascular surgery (vascular anastomoses).

(c) **Two-way evaluation:** (i) initiate pre and post rotation testing of the residents, to create objective evidence that your objectives were accomplished, (ii) initiate weekly open feedback sessions that allow the residents to critique, to monitor *your* progress.