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INVITED COMMENTARY

Loss of liver transplant surgeons into alternate career paths: how to overcome?

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Michael Thomas from the Munich group addresses in this issue the important problem of loss of surgeons in the field of liver transplantation surgery [1]. Indeed, a major, worldwide, problem in the field of liver transplantation (LT) is to assure to our patients continuity of surgical competence and skill. Half of a century after its introduction by STARZL in clinical practice, LT has become for many caregivers 'routine' surgery, so 'attractivity' and 'prestige within the medical community became lost. Especially in the Western world, the change of the 'surgical guard' (read pioneers) modified the transplant procedure into a *technical service*. As a consequence, younger surgeons get less attracted to this demanding field, but, even worse, less of them become really trained in medical and surgical aspects of transplantation [2]. The consequences are clear, and the care for this, initially, surgical patient is progressively taken over by transplant physicians. Notwithstanding the necessity of multidisciplinary collaboration, this evolution has two major, underestimated, consequences: the vanishing of the 'global care' of the liver recipient and also the degree of satisfaction of the surgical team. Quality of care for organ recipients needs a continuous, high-level dialogue between transplant surgeons and physicians! This interplay can only stand when adequate training is obtained at both sides.

The Munich paper highlights several reasons for the loss of, even fully trained, liver transplant surgeons: inclusion of transplantation within other surgical activities, absence of well-dedicated training programs in transplantation, obligation to fulfill many administrative tasks besides a physically and mentally very demanding job, unattractive lifestyle issues, absence of autonomy within the hospital structure, noncompetitive salaries and (maybe most of all) lack of available positions and dead-end academic career.

This problem was already pointed out in my presidential address given at the 2005 Geneva ESOT congress! [3]. During my ESOT presidency, I was impressed by the frequent requests from colleagues all over Europe to identify, well-trained, transplant surgeons to revitalize their ('hypoxic') LT programs. So the initiative was taken to do an inquiry within the European Society of Organ Transplantation (ESOT) in relation to burnout and career planning of transplant surgeons. The answers why to leave the transplant activity were as follows: better appeal of other surgical specialties within or outside the hospital (65 and 35%); in contrast personal or familial reasons (52%). In contrast financial reasons (21%); lack of career planning (21%); and too demanding job (6%.) scored low. However, when asking how to make the profession of transplant surgery more attractive, the answers differed much, coming closer to the real ground! Financial upgrading (100%!) and career planning (64%) were the leading arguments followed by widening of surgical spectrum leading to a better mental rest

(56%), improving administrative help (54%), introducing flexible working time (36%), reduced workload (33%), adapted duty scheme (33%) and finally team building (24%) [3].

All these arguments are very good indicators of burnout, which is indeed a major problem in surgery (up to 50%) and in transplantation in particular [4–6]. This can be very easily explained by the important physical as well as mental stress related to a many times, very, demanding surgical procedure and by the care of the, many times, multimorbid liver recipients. This has become even more important since the introduction in clinical practice of the MELD-based liver allocation system which leads to an almost continuous confrontation of the transplant team with very sick patients surrounded by desperate family members [7].

In order to cope with these difficult situations, inherent to the wide implementation of the MELD system, the infrastructure of transplant centers will need to be adapted by building up 'real multidisciplinary transplant teams', consisting of specialists acquainted with all different aspects of transplantation medicine (e.g.transplant psychologist,infectiologist, anesthesiologists, intensivist etc). In order to bring this to a good end, a thorough reflection on the 'rationalisation' (read reduction) of the number of transplant centers will become necessary in order to render available the necessary financial ressources.

To cope with such evolution, the ESOT Educational committee (www.esot.org) set up at that time a master training program in transplantation including theoretical as well as practical courses. This program, further developed in close collaboration with the UEMS (Union Européenne des Medecins Spécialistes), lead to the establishment of the European Board of Transplant Surgery (BTS). This board further elaborated the recognition of the profession of transplant surgeon at an European level by creating the diploma of transplant surgeon. To obtain this diploma, one has to proof during an audited exam his surgical and medical knowledge in the fields of organ donation as well as in one or several specific organ domains [2]. Without any doubt, such official recognition will increase visibility and recognition of the transplant surgeon within his medical environment.

Another important feature to raise the attractivity of transplant surgeon will (or must) be the creation of transplant centers or institutes with distinctive governance structures [8,9]. This structuring will allow enhanced recognition (and thus self-esteem), improved regulatory compliance, transplant volume growth with inherent quality improvement, and, importantly, increased funding for research and potential engagement of new staff members. Indeed transplantation (surgery) should come out of the traditional 'department silos'. Too much hospital directors are still the decision makers and takers without even knowing the hard reality of transplantation surgery and medicine. Transplant surgeons and teams disserve indeed a special status in relation to career planning and financial income. This is especially important when they are included in a surgical department structure [8].

The Munchen group broadened, based on the herein published results, their research on the 'futile transplant careers' to the national German level. Similarly, a study has been launched at the European level by ESOT in relation to burnout in transplant surgery. It can already be foreseen that both studies will further underline the need to take measures to stimulate not only 'inflow' of young transplant surgeons but also the 'outflow' of well-trained transplant surgeons facing all aspects of organ donation and transplantation. Only by doing so, the transplant community will finally be able to fulfill its commitment nl. to transplant much more patients by providing high-risk, split, and living donor livers. One should hereby keep in mind that the ultimate parameter measuring the quality of a liver transplant program should be the mortality on the waiting list. As I stated once, the future of liver transplantation will not (only) be hampered by the shortage of livers, but even more by the shortage of surgeons putting them in. So we have to protect this 'endangered species'!

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