Evaluating the differences in the early laparoscopic donor nephrectomy learning curves of a Swiss high volume transplant program and a South African low volume transplant program after knowledge transfer.

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Purpose: To describe the retroperitoneoscopic donor nephrectomy learning curve differences between a high volume (trainer) hospital in Basel, Switzerland and a low volume (trainee) hospital in Tygerberg, South Africa.

Materials and methods: Techniques for performing the surgery were near identical. Databases were prospectively maintained in both units. Comparisons were made of the first 74 cases in each database. Variables compared include operating time, warm ischemic time, blood loss, graft function and hospital stay. Sub-group analyses of a single Basel surgeon were conducted, and the first and last 25 cases in each series were analysed.

Results: Donor age and gender differed widely. More left sided operations were done in Basel (72% vs. 58%). Operative times, blood loss and donor creatinine did not differ. Warm ischaemic time was significantly shorter in the Basel group. There were double the number of graft failures in the Tygerberg group (6 vs. 3). Both groups showed a decline in operating times, plateauing at 30 – 34 cases.

Conclusions: There are significant differences in the learning curves of the Swiss (trainer) and South African (trainee) hospitals. These differences are clinically not as pronounced, and the knowledge transfer was worth the effort.