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# Lebensqualitätsevaluation der Spender nach laparoskopischer Donornephrektomie

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## Background

- Laparoscopic donor nephrectomy the procedure of choice for living kidney donation in many centers
- Benefits of living donor organs for recipients are well documented
- Limited Data on quality of life issues among living donors
- We report on donor-related quality of life (QoL) and social state after laparoscopic hand-assisted donor nephrectomy (HALDN) for living donation



# Background



ELSEVIER

## Impact of Hand-Assisted Laparoscopic Living Donor Nephrectomy on Donor's Quality of Life, Emotional, and Social State

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### ABSTRACT

**Background.** Laparoscopic donor nephrectomy has become the preferred method for live kidney donation in many centers. Herein we have reported on donor-related quality of life (QoL) and social state after laparoscopic hand-assisted nephrectomy (HALDN) for living kidney donation.

**Patients and Methods.** Between December, 2003 and May, 2008, we performed 48 HALDN. To evaluate QoL, we mailed to the donors a structured questionnaire based on a combination of the WHOQOL-BREF questionnaire and the 36-item health survey (SF-36) with slight modifications. The QoL scores were compared with data from a matched group of the German healthy population. We evaluated clinical results in donors and recipients by reviewing the records, and calculated 1-year graft survival according to the Kaplan-Meier method.

**Results.** In all domains, the QoL scores were higher than those among the normal population. The higher QoL was independent of time since donation. When asked to rate their health at the time of the questionnaire, 91% rated it as good, very good, or excellent, 6% as fair, and 3% as poor. When asked to rate the pain around their scar, 91% rated it as mild or absent: Of the patients, 94% were likely to say that they would donate again, if it were possible. For 6% of the patients the overall experience was stressful.

**Conclusion.** HALDN is safe. QoL changes after kidney donation are low and comparable to those of the healthy population.





## Patients and methods

- Surgery Period: 12/2003- 03/2008
- 48 hand-assisted living donor nephrectomies
- Structured QoL-questionnaire mailed to the donors
- combination of WHOQOL-BREF questionnaire and 36-item health survey (SF-36)
- 44 patient (91.6%) responded



## Results

### Demographic data of donor-population operated by HALDN

Categories	HALDN
Patients (n)	44
Age (mean $\pm$ SD [range], years)	44.1 $\pm$ 13.1 (32-61)
Ratio female/male	25/19
Body mass index (kg/m <sup>2</sup> )	24.1
Marital status - Single	12%
- Married	66%
- Partnered	22%
Employment - Full time/part time	77%
- Retired	17%
- Other	6%
Time since donation (median $\pm$ SD [range], months)	21.1 $\pm$ 6.2 (5-40)



## Results

Operative and postoperative data of the study population

Categories	HALDN
Donors (n)	44
Operative time (median [range], min)	138 [113-180]
Warm ischemia time (median [range], sec)	52 [25-132]
Hospitalization period (median [range], d)	3.7 [5-7]
Operative blood loss (median [range], ml)	121 [48-420]
Intraoperative complications*	2/44 (4.2%)
Postoperative complications	0%
Incisional hernia	3%

\* prolonged bleeding (total blood loss 420 mL) / small capsular tear of the spleen



## Results: Recipients

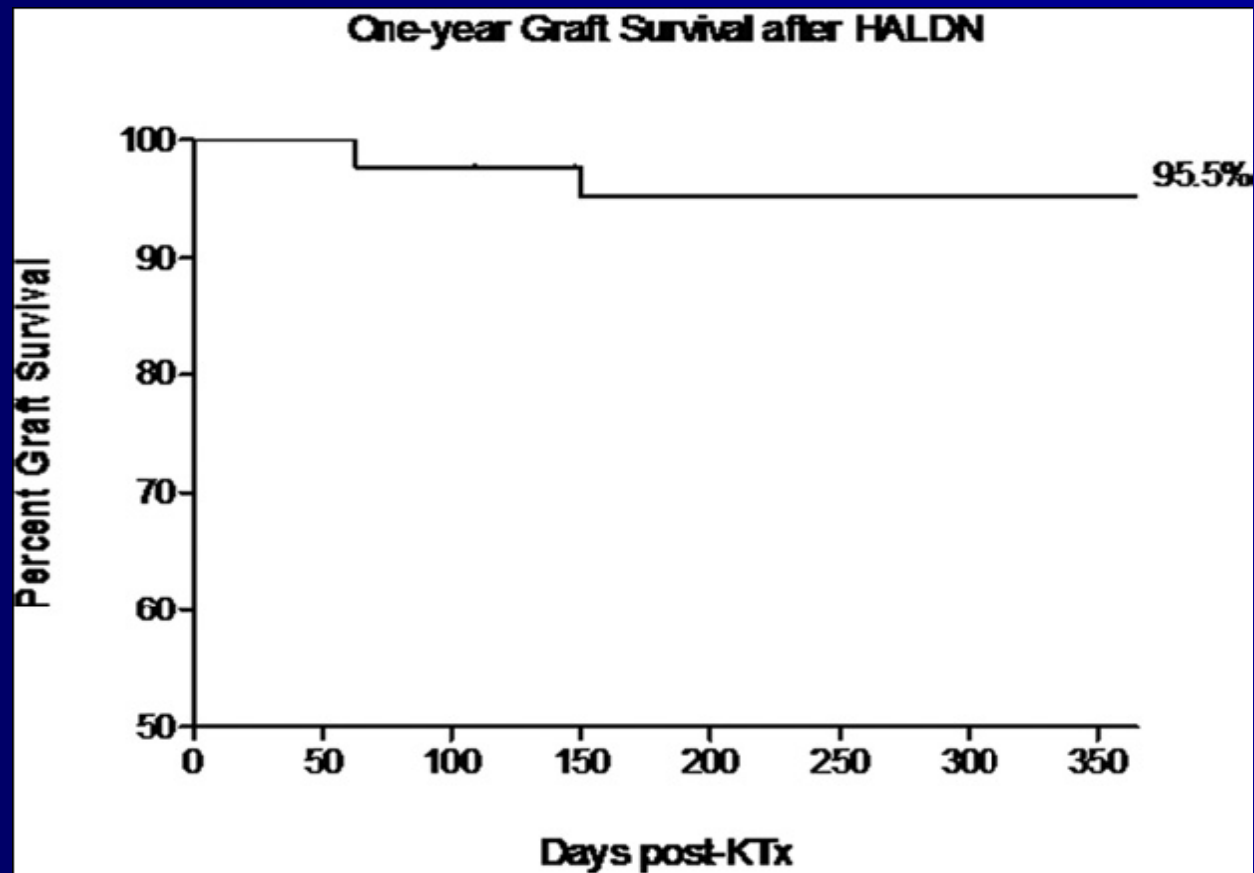
**recipients** of HALDN recovered grafts

Categories	HALDN
Number of recipients (n)	44
Age (mean $\pm$ SD, years)	45.4 $\pm$ 11.2
Ratio Female/male	1.3
Immunosuppression regimen	
- Triple	30/44
- Triple + 1	14/44
Delayed graft function	2/44 (4.5%)
Graft loss during 1 year	2/44 (4.5%)
One-year posttransplant graft survival	95.5%
Mean $\Delta$ creatinine at POD1 (mg/dl)	- 4.6
Creatinine (mean $\pm$ SD, mg/dl) 1 year post-transplant	1.18 $\pm$ 0.21



## Results: Recipients

# One-year graft survival

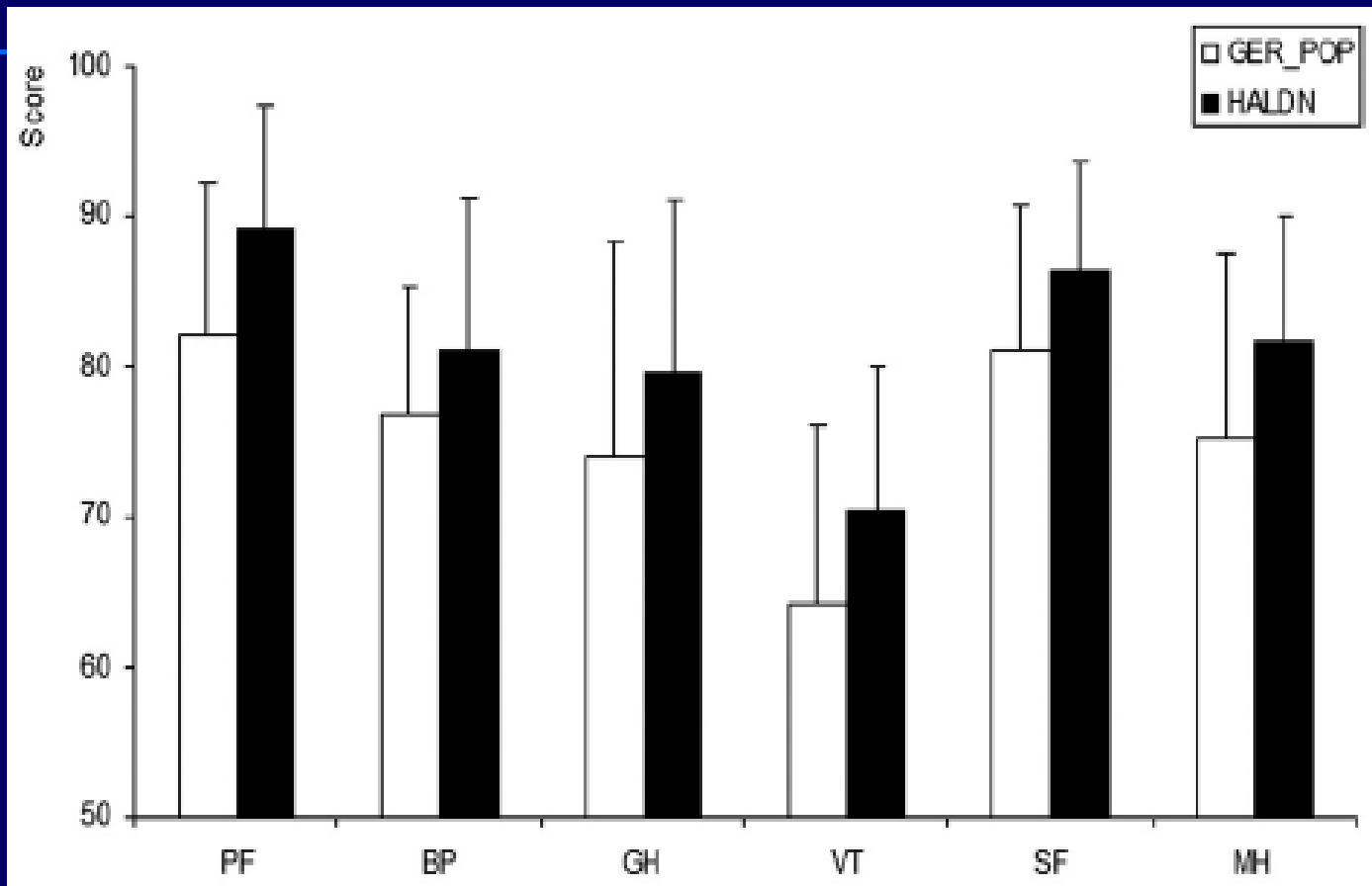






## Results

Mean quality of life (QoL) scores of the donors



PF=physical function, BP=bodily pain, GH=general health, VT=vitality, SF=social function, MH=mental health, GER-POP=German population



## Results: QoL

Pain around scar:

**90% mild or absent**

**6% moderate**

**4% severe or very severe**

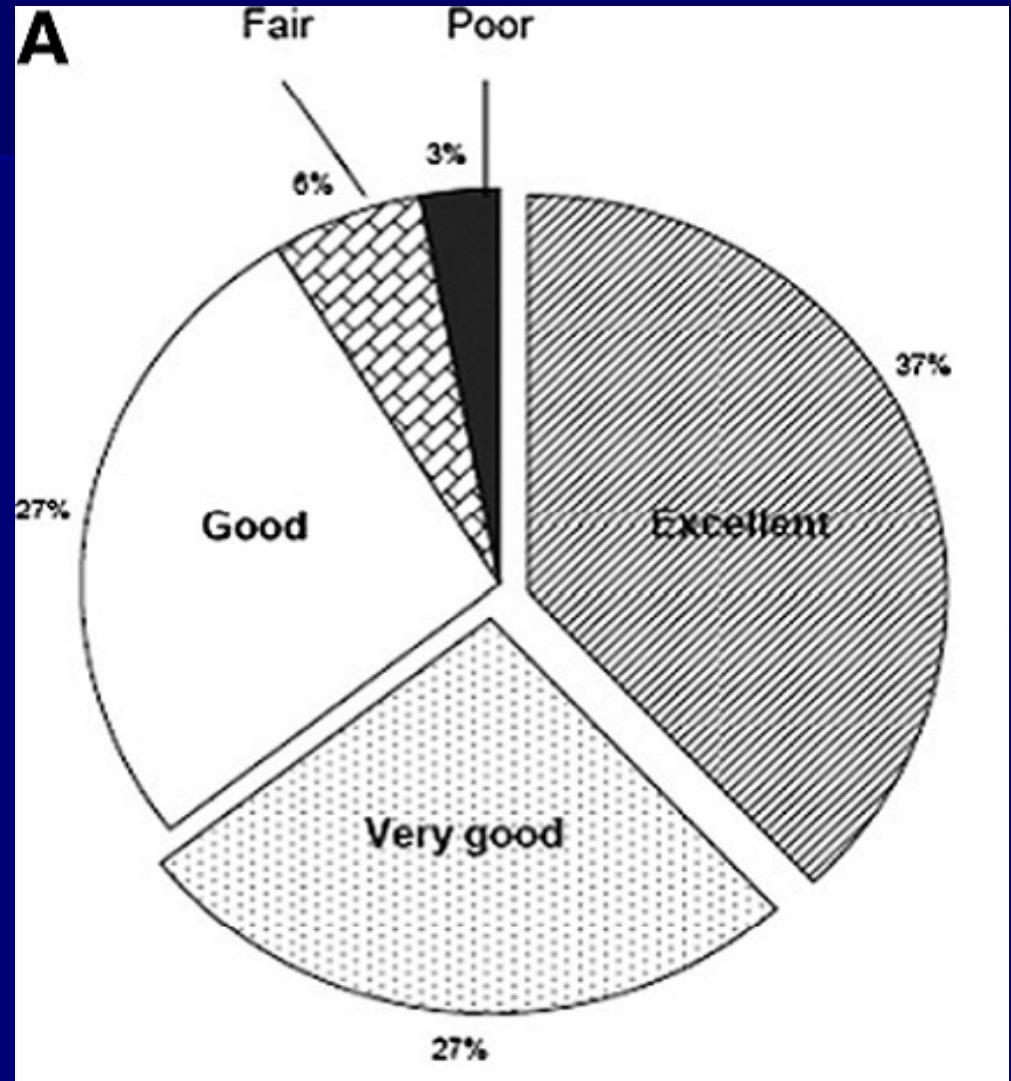
18% of donors stated that the donation procedure had a negative impact on their life, including 26% who expressed health concerns, and 26%, emotional problems

86% of donors stated that they felt better about themselves after donating one of their kidneys.



## Results: QoL

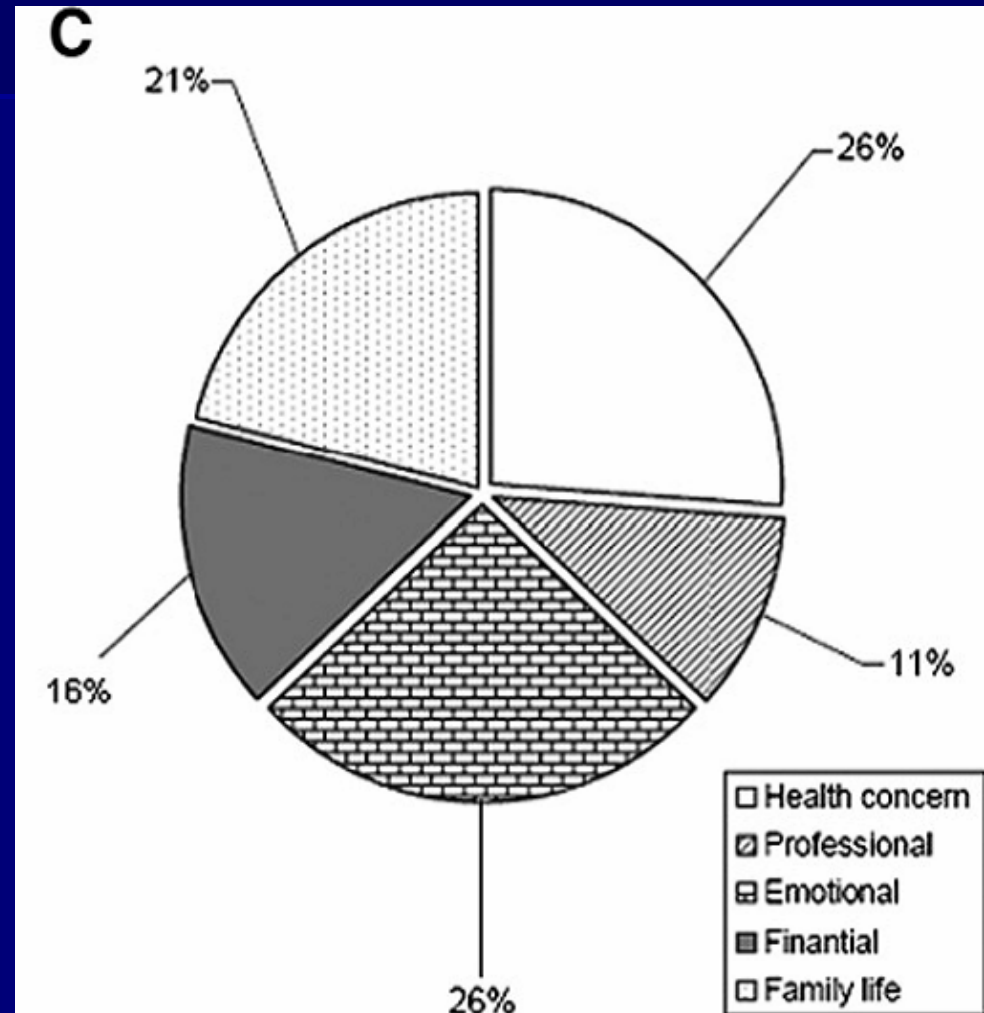
General Health Situation





## Results: QoL

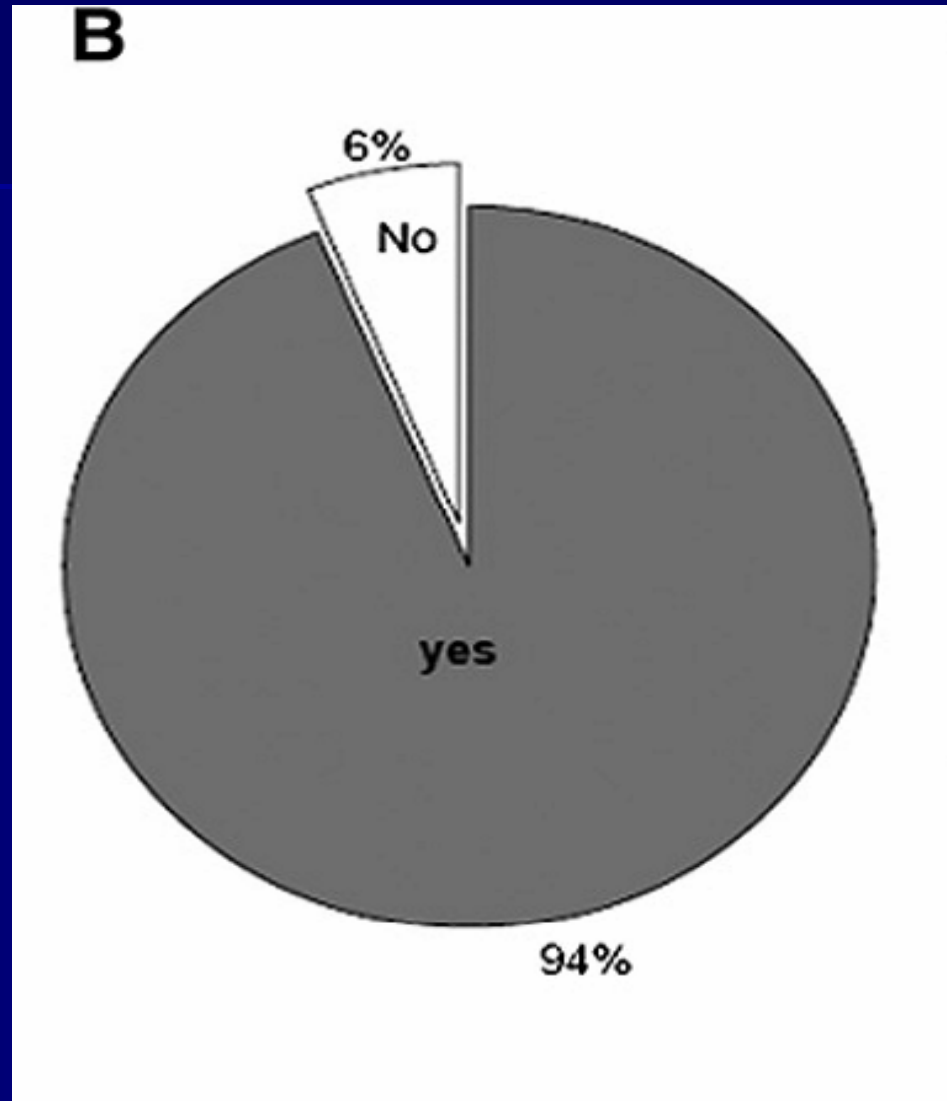
**18%** of donors stated that the donation procedure had a negative impact on their life





## Results: QoL

Willingness to donate again





## Conclusions

- Laparoscopic hand-assisted donor nephrectomy is safe
- The QoL scores of donors were higher than those of the normal population in all domains
- The higher quality of life in donors was independent of time since donation
- The observed high QoL in our study population was consistent with other published reports



**Thank you for your attention!**