

Hand-assisted laparoscopic donor nephrectomy of the right or left kidney.

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The hypothesis was that donors who underwent a right sided HALDN would have a shorter operation time.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON25262

Bron

Nationaal Trial Register

Verkorte titel

LAPNIER STUDY

Aandoening

Kidney transplantation, laparoscopy, minimally invasive surgical procedures, donor nephrectomy.

Ondersteuning

Primaire sponsor: sponsor Academic Medical Center (AMC)

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city Amsterdam

country The Netherlands

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Overige ondersteuning: none

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Operation time.

Toelichting onderzoek

Achtergrond van het onderzoek

The number of living donor transplantations has increased during the past 20 years due to the shortage of deceased kidney donors and an increased number of patients on the waiting list for renal transplantation. Living donor kidney transplantation is superior to deceased donor kidney transplantation because of the better patient and graft survival rates, better cost-effectiveness and improved quality of life (QoL) of the recipient (1,2). Open living donor nephrectomy is associated with disincentives including long hospital stay, prolonged postoperative pain, cosmetic problems and slow convalescence. These disincentives might be a drawback for potential donors to donate a kidney. With the advent of laparoscopic living donor nephrectomy a reduction in hospital stay, less postoperative analgesic requirements, improved cosmetics, and an earlier return to normal daily activities have been reported (3). There is an ongoing discussion whether the right or the left kidney donor nephrectomy is to be preferred. Most centers prefer to use the left kidney for live kidney donation because of the longer renal vein, which is advantageous during the implantation. However, some surgeons prefer the right kidney because it is easier to recover than the left kidney and the risk of spleen laceration is decreased (4). A recent study demonstrate the negative effect of longstanding pneumoperitoneum on kidney function. Reduction of operation time with maintenance of the beneficial effect of the minimal invasive aspect of the laparoscopic donor nephrectomy is essential(5). There are no prospective studies comparing the outcome of left sided versus right sided laparoscopic donor nephrectomy in terms of operating time. Therefore a prospective single-center randomized trial was conducted performing either a left or a right sided hand-assisted laparoscopic donor nephrectomy.

Doel van het onderzoek

The hypothesis was that donors who underwent a right sided HALDN would have a shorter operation time.

Onderzoeksopzet

N/A

Onderzoeksproduct en/of interventie

Specific preoperative donor evaluation included blood and urine examination, angiography, pyelography and renal scintigraphy.

In case of bilateral multiple arteries they were only included in the study if both kidneys were judged transplantable by the surgeon.

The hand-assisted laparoscopic donor nephrectomy (HALDN) is done transperitoneally.

After open dissection of the distal ureter and gonadal vein through a 7-8 cm Pfannenstiel incision the non dominant operators' hand is introduced through a handport and two 10-12 mm trocars are placed. The insufflation pressure was maximally 12 mmHg. The right or left colon was then mobilized. After transecting the ureter distally, the renal artery is transected with metal clips, while an endoscopic stapler is used to transect the renal vein. The kidney is extracted through the Pfannenstiel incision and cold flushed and preserved with University of Wisconsin solution (UW).

Postoperatively, all patients are treated equally with regard to feeding, pain regulation, mobilization and postoperative care.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Donors with age above eighteen years;
2. An identical kidney with regard to renal vascular anatomy;
3. Renal function and urinary tract;
4. Written informed consent.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Unilateral multiple renal arteries.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	15-04-2002
Aantal proefpersonen:	60
Type:	Werkelijke startdatum

Ethische beoordeling

Positief advies
Datum: 24-07-2007
Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL998
NTR-old	NTR1027
Ander register	:
ISRCTN	ISRCTN90285720

Resultaten

Samenvatting resultaten

Maartense S, Idu M, Bemelman FJ, Balm R, Surachno S, Bemelman WA.

Hand-assisted laparoscopic live donor nephrectomy.

Br J Surg. 2004 Mar;91(3):344-8.

Lind MY, Hazebroek EJ, Hop WC, Weimar W, Jaap Bonjer H, IJzermans JN. Right-sided laparoscopic live-donor nephrectomy: is reluctance still justified? Transplantation. 2002; 74:1045.

Buell JF, Edye M, Johnson M, et al. Are concerns over right laparoscopic donor nephrectomy unwarranted? Ann Surg. 2001; 233:645.

Husted TL, Hanaway MJ, Thomas MJ, Woodle ES, Buell JF. Laparoscopic right living donor nephrectomy. Transplant Proc. 2005; 37:631.

Mandal AK, Cohen C, Montgomery RA, Kavoussi LR, Ratner LE. Should the indications for laparoscopic live donor nephrectomy of the right kidney be the same as for the open procedure? Anomalous left renal vasculature is not a contraindication to laparoscopic left

donor nephrectomy. Transplantation. 2001; 71:660.