

SURGICAL COMPLICATIONS OF ALLOGRAFT NEPHRECTOMY: STUDY OF RISK FACTORS

BY

Mohamed Kamal Gheith, MD.
Urologische Klinik und Poliklinik,
Universitätsmedizin, Mainz.

Renal transplantation is the preferred treatment for end stage renal disease.

However, the overall graft survival is:

92% at 1 year.

75% at 5 years.

(Collaborative Transplant Study, Jan.2012)

Causes of graft failure

Early:

Humoral rejection.

Arterial thrombosis.

Late:

Chronic allograft nephropathy.

Recurrent renal disease.

The percentage of transplants ending to nephrectomy varies from 0.5 to 43%.

Failed renal allograft could cause complications as:

Fever.

Hematuria.

Pain/ tenderness.

Uncontrolled hypertension.

(Gonzalez et al., 2000)

These complications could be controlled by conservative management:

Small doses of steroids.

As long as the conservative management succeeds, the graft could be left in place.

In some graft failure patients, immunological treatment fails to control the symptoms so graft nephrectomy becomes mandatory.

(Noel et al., 1997)

Graft nephrectomy is a procedure of considerable risk of:

Morbidity
Mortality



Immunosuppressive medications,
Timing of graft removal,
Surgical technique.

(Sharma et al., 1989)

Objective

To study the risk factors affecting the incidence
of surgical complications of failed allograft
nephrectomy

Materials and methods

1976 to 2010.

2200 live donor renal allotransplantation in Mansoura, Egypt.

130 recipients underwent graft nephrectomy.

All nephrectomies were performed via the same incision of renal allotransplantation.

All reported surgical complications were evaluated regarding:

Timing of graft nephrectomy.

Surgical approach (extra or intracapsular).

For statistical analysis, Chi square test was applied

$P < 0.05$ was considered of significant value.

Results

Total number of graft nephrectomies was 130 patients.

14 (10.8%) patients developed postoperative surgical complications.

116 (89.2) patients had uneventful postoperative course.

Postoperative graft nephrectomy complications No(%)

Wound infection.	7(5.3)
Symptomatic collection/hematoma.	5(3.8)
Septicemia.	3(2.3)
Mortality.	1(0,7)

Variables/Groups	Noncomplicated group	Complicated Group	P value
Mean age (yrs)	35.5 ±11.2	38.2 ±8.4	0.72
Sex (male / female)	79/37	10/4	0.81
Intra/ Extracapsular	102/14	11/3	0.54
Diabetes	13	5	0.25
Acute rejection	91	12	0.48
Lymphocele	20	4	0.44
Multiple arteries	8	3	0.2

Timing of graft nephrectomy

Timing	Noncomplicated group	Complicated Group	P value
< 6 months	19 (76%)	6 (24%)	
> 6 months	97 (92.4%)	8 (7.6%)	0.04

Conclusions

Graft nephrectomy represents 6% of all renal allotransplant cases.

Surgical complications were higher in graft nephrectomy performed in the first six months following transplantation.

Surgical complications in intracapsular versus extracapsular graft nephrectomy were similar.

THANK YOU

