

Imperative versus elective purely off-clamp minimally-invasive partial nephrectomy: results of a single-centre experience (MP57-15)

Flammia R.S.², Anceschi U.¹, Tuderti G.¹, Brassetti A.¹, Ferriero M.C.¹, Costantini M.¹, Bove A.¹, Guaglianone S.¹, Mastroianni R.², Gallucci M.², Simone G.¹

1 Regina Elena National Cancer Institute, Department of Urology, Rome, Italy; 2 "La Sapienza" University of Rome, Department of Urology, Rome, Italy

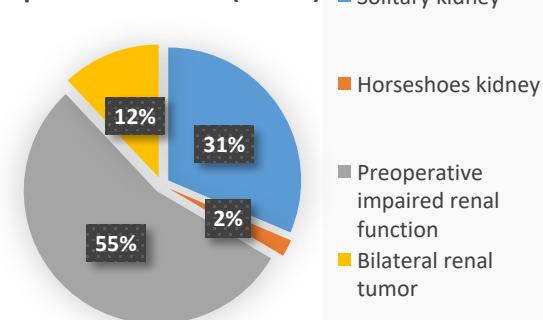
Aim

To compare **perioperative, pathological** and **functional outcomes** between patients who underwent purely off-clamp minimally-invasive partial nephrectomy (ocMIPN) for an **imperative (I)** or **elective (E)** indication at a single high-volume centre.

Methods

From **July 2004** to **October 2018**, **701** patients who underwent ocMIPN were analyzed from our prospectively -maintained partial nephrectomy dataset.

Imperative ocMIPN (n=242)



Results Perioperative, pathologic and functional outcomes

Variable	Imperative (n=242)	Elective (n=459)	P value
Age	60.2 (SD 12.7)	59.7 (SD 12)	0.66
ASA score			0.06
1-2	110 (65.9%)	249 (73.9%)	
3-4	57 (34.1%)	88 (26.1%)	
Tumor size (cm)	4 (SD 2.63)	4.3 (SD 2.26)	0.08
RENAL	7.98 (SD 2.48)	7.93 (SD 1.92)	0.87
LOS	4.7 (SD 2.3)	4 (SD 1.16)	< 0.001
Primary Tumor Stage			< 0.001
pT1a	107 (54%)	178 (48.8%)	
pT1b	43 (21.7%)	132 (36.2%)	
pT2a	6 (3%)	23 (6.3%)	
pT2b	16 (8.1%)	9 (2.5%)	
pT3a	26 (13.1%)	23 (6.3%)	
Preoperative eGFR	55.3 (SD 16.2)	85.9 (SD 22.7)	< 0.001
Preoperative CKD stage			< 0.001
1	8 (3.5%)	153 (34.1%)	
2	41 (18.1%)	252 (56.1%)	
3a	131 (58%)	32 (7.1%)	
3b	37 (16.4%)	7 (1.6%)	
4	9 (4%)	5 (1.1%)	

Variable	Imperative (n=242)	Elective (n=459)	P value
PSM	5 (2.1%)	7 (1.6%)	0.591
Postoperative eGFR	52.6 (SD 18.8)	74.5 (SD 25.6)	< 0.001
Last eGFR	56.1 (SD 21.2)	79.6 (SD 24)	< 0.001
Delta eGFR	-13 (SD 26.4)	-2.64 (SD 21)	< 0.001
Last control CKD			< 0.001
1	15 (6.7%)	107 (29.6%)	
2	57 (25.3%)	198 (54.7%)	
3a	79 (35.1%)	40 (11%)	
3b	54 (24%)	10 (2.8%)	
4	17 (7.6%)	6 (1.7%)	
5	3 (1.3%)	1 (0.3%)	
Newly onset CKD 3b	35 (15.6%)	7 (1.9%)	< 0.001
Newly onset CKD 4-5	15 (6.7%)	4 (1.1%)	< 0.001
Perioperative Complications (Overall)	29 (12%)	46 (10.2%)	
Clavien I	10	13	
Clavien II	19	26	0.472
Clavien III	0	6	
Clavien V	0	1	

Results Perioperative, pathologic and functional outcomes

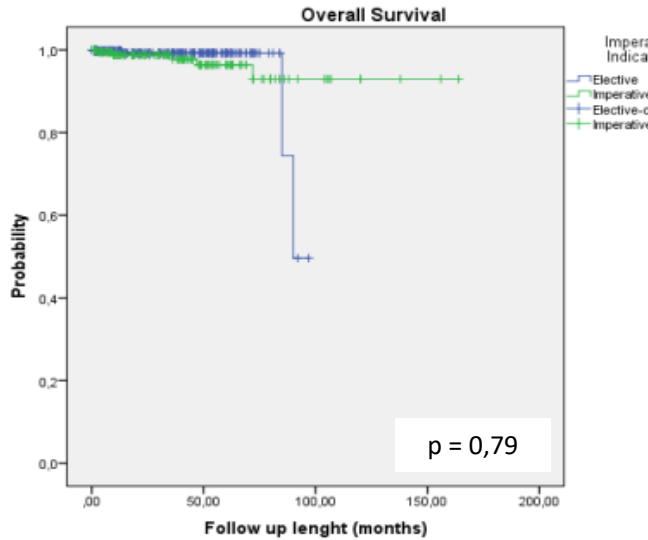


Fig.1 K-M analysis showing **OS** for imperative and elective RAPN

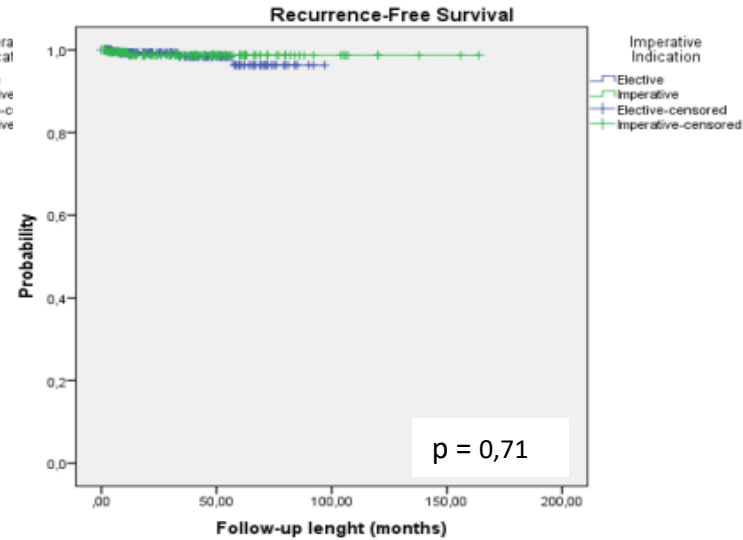


Fig. 2 K-M analysis showing **RFS** for imperative and elective RAPN

Conclusion

I-ocMIPN is associated to a longer hospital stay and to an increased rate of significant renal function deterioration.

The oncologic outcomes of are comparable between imperative and the elective setting.

These aspects should be considered during patient counselling when offering nephron sparing surgery in imperative setting. .