

Cost-consequence study comparing supra pubic catheter and cystectomy with ileal conduit for neurogenic bladder

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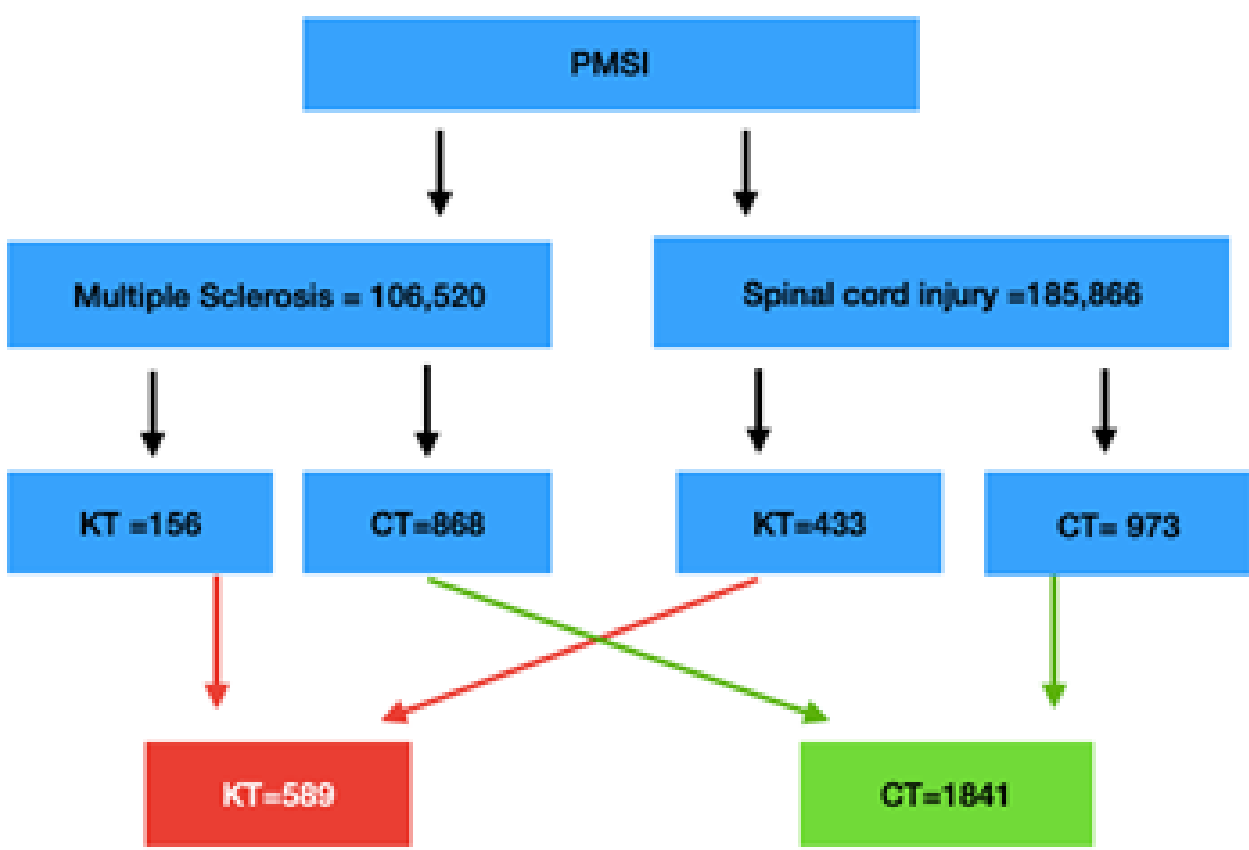
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Aims of study

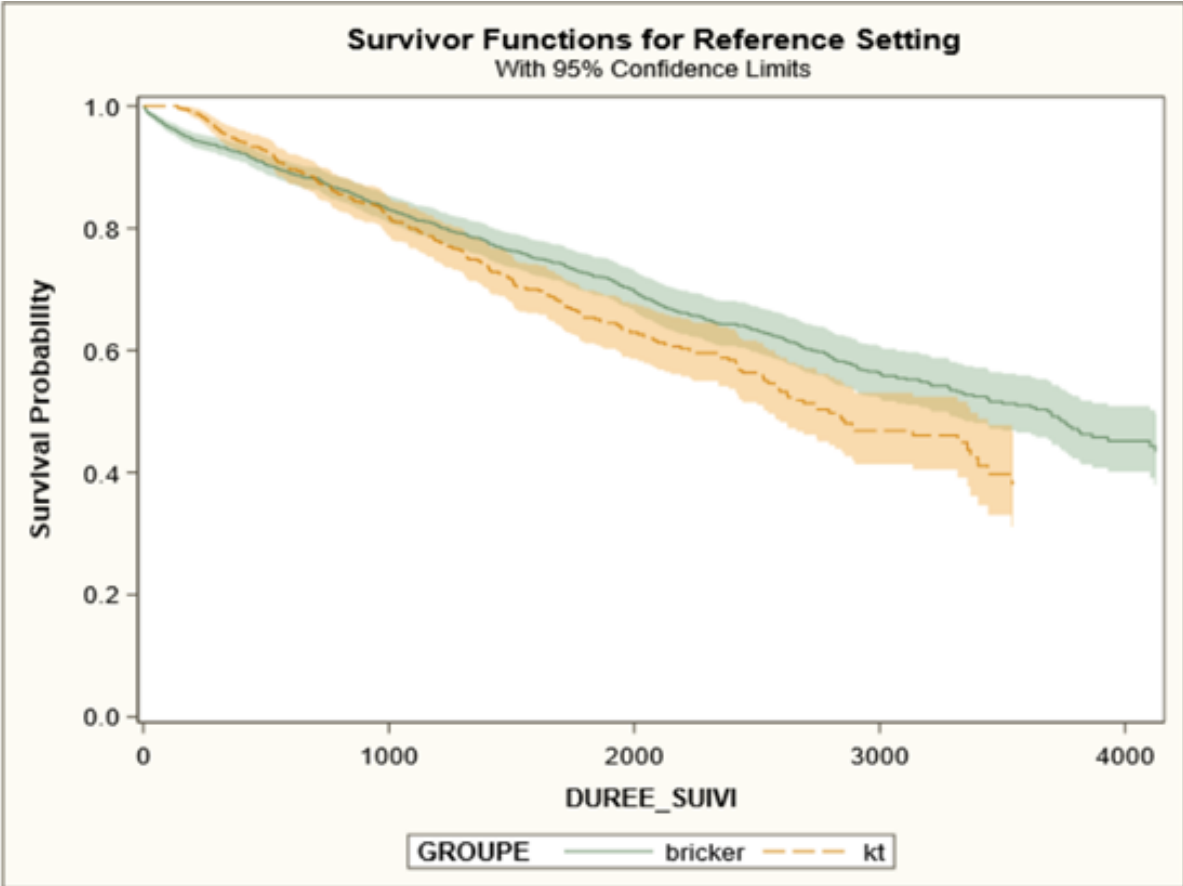
- Cystectomy + ideal conduit (CT) VS suprapubic catheter (KT)
- Overall survival and costs
- Rate of overall and specific rehospitalizations
- Cost of overall and specific rehospitalizations

Study design, materials and methods

- Retrospective study over 10 years from the PMSI database
- Multiple sclerosis or spinal cord injured patients
- 1841 Cystectomy + ideal conduit (CT)
- 549 suprapubic catheter (KT) (defined by at least 4 procedures with maximum of 3 months between two procedures)
- Cox model adjusted for age, sex and pathology
- Overall and specific Rehospitalization: fish model adjusted for age, sex and pathology
- Cost Comparison: Generalized Linear Regression



Results and interpretation



- At 1 year:
Lower survival in the CT group
Rehospitalization equivalent in both groups

	Risk of events	
	HR [IC95]	P-value
Survival	2.055 [1.359 ; 3.107]	0.006
Survival without hospitalisation		
Any causes	1.059 [0.944 ; 1.188]	0.3308
Uro-nephrological reason (CMD11)	0.933 [0.795 ; 1.096]	0.4012
Lithiasis	1.036 [0.553; 1.939]	0.9126
Urinary tract infection	0.753 [0.528; 1.074]	0.1171

- After 1 year:
Higher survival in the CT group
Lower survival without rehospitalization for kidney and urinary tract disease and lithiasis

	Risk of events	
	HR [IC95]	P-value
Survival	0.767 [0.642 ; 0.915]	0.0033
Survival without hospitalisation		
any cause	0.951 [0.763 ; 1.186]	0.6555
uro-nephrological cause (CMD11)	0.576 [0.472 ; 0.702]	<.0001
Lithiasis	0.899 [0.650 ; 1;243]	0.5202
Urinary tract infection	0.647 [0.496 ; 0.842]	0.0012

- Average cost of a CT superior to KT

	CT N= 1,713	KT N= 489	P value
Total Cost per patient €, Mean (standard deviation)			
All causes	47,293 (46,542)	34,225 (42,081)	<.0001
uro-nephrological cause (CMD11)	22,267 (21,442)	9,021 (12,452)	<.0001
Lithiasis	14,344 (11,599)	2,289 (3,634)	<.0001
Urinary tract infection	14,133 (10,679)	2,962 (4,043)	<.0001
Total Cost per patient and per year, Mean (standard deviation)			
All cause	9,446 [9,444 ; 9,448]	7,903 [7,899 ; 7,907]	<.0001
uro-nephrological cause (CMD11)	4,447 [4,446 ; 4,449]	2,083 [2,081 ; 2,085]	<.0001
Lithiasis	2,865 [2,864 ; 2,866]	528 [528 ; 529]	<.0001
Urinary tract infection	2,823 [2,822 ; 2,824]	684 [683 ; 685]	<.0001

Conclusion

- Main outcomes
- CT remains more expansive than a KT
- but with improvement in a long term survival
- With lower specific rehospitalizations
- Perspectives
- Large cost-effectiveness or cost-utility studies should be performed
- QoL should be assessed