#85: Objective diagnosis-guided management and the need for invasive treatment of referred men with symptoms of lower urinary tract dysfunction, with (10y maximum) follow up.

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Introduction

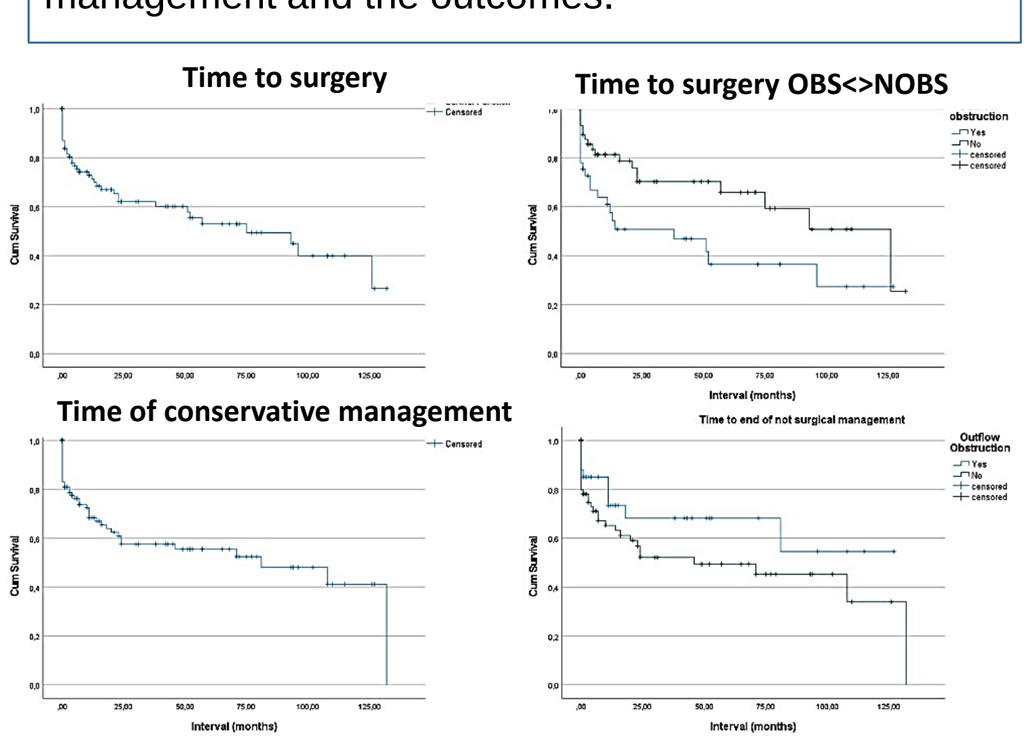
Guidelines: LUTS-male:
Failure of initial management (based on symptoms)
Recommend to consider(!) objective assessment
Usual: Surgery

Symptoms do not adequately predict the existence of outflow obstruction.

Clinical strategies, based on objective assessment of dysfunction(s) in these men are however scarcely described.

We report a large series of men, referred with symptoms of LUTD that all have had objective (UDI) grading of BOO in addition to uroflowmetry and transrectal ultrasound prostate volume measurement.

The aim of our evaluation is to uncover how the results of objective assessment have affected our management and the outcomes.



Methods and Materials

38 randomly selected (from our 'BPH-database') men aged 64,6y (s.d. 10,2) with IPSS 17,8 (6,7) and QuOL 3,4 (1,4) at referral, had prostate size 70,0 cm3 (30,5) and (free flow) Qmax 10,4 mL/s (6,2) and a voided volume of 159,0 mL (128,7) with PVR of 79.0 mL (104). Most patients (81; 58,7%) had pharmacological treatment at referral. (32%: alpha-blocker only, 12% others had used these, but stopped; and 8% had polypharmacy for various reasons). 75 (54,3%) men were not satisfied with their LUTS- medication. 34 (24,6%) had not received earlier specific treatment for their LUTS. Some had UTI, pain or AUR in the past and 4 (2%) had prostate carcinoma and LUTS during expectative management for their prostate carcinoma. Two patients were initially referred with erythrocyturia.

UDI was performed according to the 2006 ICS standard

Pressure flow study (PFS)
outflow obstruction grade URA: 37,9 cmH2O (s.d. 20,4)
BOOI 52,7 (34,1).
detrusor voiding contraction grade Wmax of 15,0 w/m2 (10,6)
BCI 116,0 (32,0)
40 patients had no BOO (ICS nomogram) and normal contraction;
37 had no BOO and weak contraction;
53 had BOO with normal contraction
8 had BOO and weak contraction.

Prostate volume correlated weak but significant with age (Pearson r: 0,302).
Free flow Qmax correlated with URA (r: -0,326) and (weak) with (PFS) PVR (r: -0,261). (PFS-) PVR correlated with URA and Wmax (r: 0,468 and r: -0,320).
No correlations were found with IPSS apart from a weak but significant total-IPSS with (IPSS-)QuOL (r:0,497).

the patients without BOO were offered continuation or adaptation /personalization of medication or conservative management.
Of note: 111 (55%) had DO during cystometry and medication was adapted for this in a proportion of patients.
The other patients, with BOO were offered surgery or, as the alternative: to start, change, or continue medication or conservative management.

Results

Table 1 shows the overall results: 16% 'chronic urology' can be considered failure: 13 returned to urological follow up. 9 other patients (also returned) had repeat UDS-PFS. No patient (in this sub-cohort) had (acute) urinary retention after referral.
In the column 'other' (10%): 10 died and (new) prostate carcinoma was found in 2. Two others had a diagnosis of other major disease.

45 (32,6%) patients returned to primary care after reconfirmation or adaption of conservative management. 57 (41,3%) had surgery.

The Kaplan Meier graphs (figure 1) shows the time to events.
Graph A: Time to surgery (total 45 patients, surgery).
Graph B (cohort 'surgery'): Time (months) to surgery based on the UDS-PFS diagnosis.
Graph C: Time of Conservative treatment for all (total 57 patients, not surgery)
Graph D (cohort 'not surgery'): Time to end of conservative urological management (return to primary care) with or without UDS- PFS diagnosis of BOO (45 patients).

Obstruction Y/N versus (long term) Outcome

			Primary care	Other	Chronic urology	Surgery	
Outflow obstruction	Yes	Count	12	6	8	35	61
		% within obstruction Y	19,7%	9,8%	13,1%	57,4%	100,0%
	No	Count	33	8	14	22	77
		% within obstruction N	42,9%	10,4%	18,2%	28,6%	100,0%
Total		Count	45	14	22	57	138
		% within obstruction	32,6%	10,1%	15,9%	41,3%	100,0%

Discussion

41% of the referred patients had surgery in the 10 years follow up period.

Nearly 33% returned to primary care with (adapted) conservative management.

16% returned or remained to urological care

Most of the patients (40%) that had surgery were operated within 24 months; 50% of the patients with BOO and 30% of the patient without BOO.

40% of patients returned to primary care within 24 months; 50% of these without BOO and 30% of these with BOO.

Patients in the cohort surgery versus not-surgery did not significantly differ in age, months of follow up, free flow Qmax or PVR, and Wmax or BCI.

URA: respectively 44,9 cmH2O (s.d.22,7) (surgery) and 31,7 cmH2O (s.d.16,5) (not surgery) as well as BOOI: respectively 64,5 (s.d.37,3) and 42,3 (s.d.32,0) were significantly different (both p 0.002) between the two cohorts.

For one out of 3 patients the result of the UDI, the objective diagnosis, was so enlightening that they could accept further drug treatment. However, for a small of patients, drug therapy merely delayed surgical intervention.

It is not clear, at present whether there are good predictors for drug treatment failure in men with demonstrated non-severe bladder outflow obstruction. On the other hand, also many men with outflow obstruction accepted continuation of medication and over a 10 years period only less than half needed surgery, whereas the guidelines recommended this for all these patients.

A larger study may better show better predictors for staging and grading of dysfunction and stratification of management.

Conclusions

Our cohort shows that treatment of men with LUTS, stratified by objective assessment, is highly feasible in secondary care and appears to reduce the need for surgery (and thus reduces operating room time, costs and risks).

Better stratification and grading of disfunction and individualization of management in elderly men is very well possible.

Guidelines should include more specific recommendations for referred male 'LUTS-BPH' -patients that have no, intermediate or moderate outflow obstruction or for men (also) having detrusor overactivity (and or underactive detrusor voiding contraction)

References

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