

NON-OBSTRUCTIVE SLINGS (NoS) FOR STRESS URINARY INCONTINENCE (SUI) AFTER PROSTATE SURGERY. ANALYSIS OF OUTCOMES IN DIFFERENT SUBGROUPS OF PATIENTS.

OBJECTIVES: To assess the efficacy and continence outcomes of AdVance (AdV) and AdVance-XP (AdV-XP) **NoS** in patients with and without failure risk factors (RF).

METHODS: Pads/day use defined the SUI grade: mild ≤ 2 pads/day, moderate ≤ 4 pads/day, severe (**SSUI**) >4 pads/day. A urodynamic study (**UDS**) was performed before implant to detect urine leakage (**UL**) and detrusor overactivity (**DO**).

CONTINENCE OUTCOME: **SOCIAL CONTINENCE (SC)** = 1pad/day, **TOTALLY DRY (TD)** = no pad use. **SUCCESS:** pad use reduction $\geq 50\%$. **POST-VOID RESIDUE (PVR)** was measured after catheter removal.

A TIME-TO-EVENT MODEL identified the **RF** during the follow-up time (**FU**), **uni-** and **multi-variable** analysis provided the Hazard Ratio (**HR**).

RESULTS: 216 slings implanted, at last FU **81% of ideal patients** achieved **SC**, **51%** were **TD**.

SC AND TD RATES were reduced by radiotherapy (**RT**) (resp. 47%-18%), **SSUI** (resp.51%-32%), **PREVIOUS INCONTINENCE SURGERY** (resp. 56%-44%), previous **URETHRAL STRICTURE (US)** (resp.44%-9%). **NO EROSIONS WERE OBSERVED;** **HIGH-PVR** occurred in 46 cases (**21%**) but spontaneously resolved in **94%**. **Two slings** were transected due to persistent high-PVR.

THE MULTIVARIABLE ANALYSIS IDENTIFIED: RF significant for **SC status: RT** (HR:3,4), **US** (HR:2,4) and **DO at UDS** (HR:2,6).

RF significant for **TD status: RT** (HR:1,7) and **positive UL at UDS** (HR:1,8); the increasing **cysto-capacity** favoured the TD (HR: 0,9).

The **risk of PVR** was reduced by **age** (OR: 0.68) and increased by **US** (OR: 2.59).

IDEAL CANDIDATES	n 124	57%
AT LEAST 1 RISK FACTOR	n 92	43%
RT-EXPOSED	n 41	19%
SEVERE SUI	n 44	20%
PREVIOUS US OR SUI SURGERY	n 38	18%

RF
SOCIAL CONTINENCE
RF
TOTALLY DRY

MULTIVARIATE ANALYSIS

VARIABLE	RF SOCIAL CONTINENCE		RF TOTALLY DRY	
	HR (95% CI)	p	HR (95% CI)	p
RT EXPOSURE [YES VS NO]	3.41 (1.9; 6.0)	.0001	1.70 (1.1; 2.6)	0.011
URETHRAL STRICTURE [YES VS NO]	2.43 (1.3; 4.6)	0.007		
UDS: POSITIVE UL [YES VS NO]			1.77 (1.2; 2.7)	0.007
UDS: DO [YES VS NO]	2.63 (1.2; 5.8)	0.017		
UDS: CYSTOCAPACITY (+100 UNITS)			0.86 (0.8; 1.0)	0.023

CONCLUSIONS: Implantation of **NoS** is effective and safe. The undesired events are rare also on comorbid patients, most of the events are transient. **RT** and **US** should be carefully considered as they significantly impair outcomes, the **grade of SUI** and the **type of sling** were not significant RF.