

# MP18-7526: Effect of the Type of Cryo Probe on Oncological & Functional Outcomes for Primary Whole Gland Prostate Cryoablation

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## OBJECTIVES

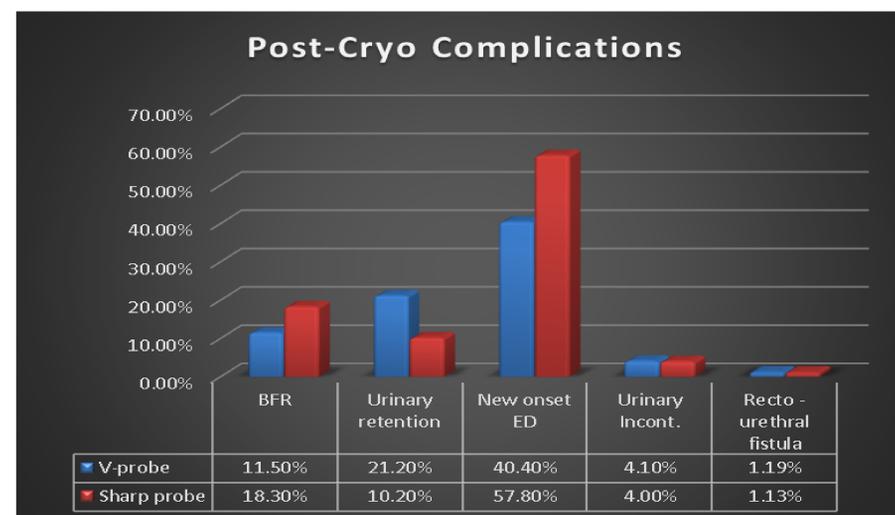
- To compare the effect of the Variable ice cryo probe (V-probe) and the conventional sharp probe on oncological & functional outcomes in men treated with primary whole cryoablation.

## METHODS

- 1569 men with completed data were included among 4235 men treated with primary whole gland prostate cryoablation
- V-probes were used in 335 & sharp probes in 1234 cases.
- Oncological outcome including biochemical failure rate (BFR) was assessed.
- Functional outcomes including post-cryo urinary incontinence, urinary retention, ED and recto-urethral fistulae were compared.

## RESULTS

- Median age was 71 years, median Gleason sum was 7 & median PSA was 6.5 ng/ml.
- V- cryo probe was used in men who were less likely to have clinical stage  $\geq$  T2b disease ( $p < 0.001$ ), of non-AA race ( $p = 0.02$ ), have lower median PSA ( $p < 0.001$ ), have higher median TPV ( $p = 0.01$ ) and were less likely to undergo NADT ( $p = 0.004$ ) compared to sharp probe cases.
- V-cryo probe was associated with a lower BFR ( $p = 0.003$ ). Higher risk of post-operative urinary retention ( $p < 0.001$ ) & a lower risk of new onset ED ( $p < 0.001$ ).
- No statistically significant differences in recto-urethral fistula ( $p = 0.9$ ) or urinary incontinence rates ( $p = 0.9$ ).



- On multivariable regression, using V-cryo probes was an independent predictor of decreased risk of biochemical failure, increased risk of urinary retention and decreased risk of 12 month new onset ED.

Variables	Post – Cryo Retention		New onset post -Cryo ED		Biochemical Failure rate	
	OR ( 95% CI)	P-value	OR ( 95% CI)	P-value	OR ( 95% CI)	P-value
Prior interventional BPH	3.7 (1.7-7.9)	<0.001	NA	NA	NA	NA
Clinical stage	1.6 (1-2.5)	0.04	1.4 (0.95-1.9)	0.08	NA	NA
ITPV	0.99 (0.98-1)	0.16	NA	NA	NA	NA
NADT	NA	NA	NA	NA	0.67(0.50-0.90)	0.008
Type of probe (v-probe)	2.5 (1.7-3.7)	<0.001	0.57(0.39-0.86)	0.007	0.58(0.40-0.85)	0.005
Gleason sum $\geq$ 7	NA	NA	NA	NA	1.3(1.0-1.8)	0.04

## CONCLUSIONS

- The use of the V-probe was associated with an improved success rate of biochemical outcome compared to the sharp probe.
- The incidence of post-operative ED was lower with the use of the V-probe, however, at the expense of an increased risk of urinary postoperative retention compared to the conventional sharp probe.