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 ≥ 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).

CONCLUSIONS

- 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.