PD61-04  PREDICTORS OF ANEJACULATION AFTER AQUABLATION PROCEDURE FOR BPH

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Men who require surgical management for benign prostatic hyperplasia interested in options that offer preservation of their sexual function and relief of lower urinary tract symptoms.

Some evidence that preserving certain key anatomic structures plays an important role in preserving ejaculation.

Anejaculation occurs less frequently after Aquablation compared to TURP.

Aquablation features allow for further investigation of intraoperative predictors of anejaculation.
The Aquablation Robotic Solution

**MULTI-DIMENSIONAL IMAGING**
- Improved decision making
- Personalized treatment planning

**AUTONOMOUS TISSUE REMOVAL**
- Autonomous execution
- Precision and accuracy
- Tissue Removal

Enhanced Information & Data Integration

Personalized, Patient-specific Surgical Standardization

**CAVITATING WATERJET**
- Tissue-selective
- Eliminates thermal complications

Tissue-selective Cavitation

Cystoscopic Visualization

Ultrasound Visualization

Optimal tissue removal plan for each patient
Study Design & Primary Outcomes

Sexually active cases from the WATER, WATER II and WATER FRANCAIS studies who demonstrated marked postoperative decrease in MSHQ-EjD scores were matched with 1-2 sexually active controls from the same trial with similar prostate size and no decrease in MSHQ-EjD scores.

The following parameters were scored by blinded experts to determine effect on anejaculation rates:

- Veru cut coverage as a percent in the sagittal plane
- Ejaculatory duct penetration
- Approximate depth of cut below veru on sagittal images (mm)
- Approximate angle offset of veru to centerline of protection zone
- Number of passes
- Intraprostatic calcifications
Study Design & Primary Outcomes
Results: Contour Parameters & Ejaculatory Function
Conclusions

Using intraoperative TRUS recordings from Aquablation procedures, we identified that violation of anatomic structures involved in ejaculation increase the risk of postoperative anejaculation.

Most careful attention to anatomic structures during contour planning may help to reduce the rate of postoperative anejaculation after Aquablation.

- When surgically planning the contour, surgeons should ensure the **cut depth does not exceed beyond 5mm below the verumontanum**, otherwise the risk of anejaculation increases.
- The parameters listed below do not affect the risk of anejaculation
  - Degree of offset from the handpiece
  - Number of treatment passes
  - Percentage of coverage over the veru using the veru protection zone function
  - Whether or not saline travelled retrograde through the patient