

Urinary Tract Infections after Robotic Assisted Laparoscopic Pyeloplasty (RALP): Are Urine Cultures and Antibiotics helpful?

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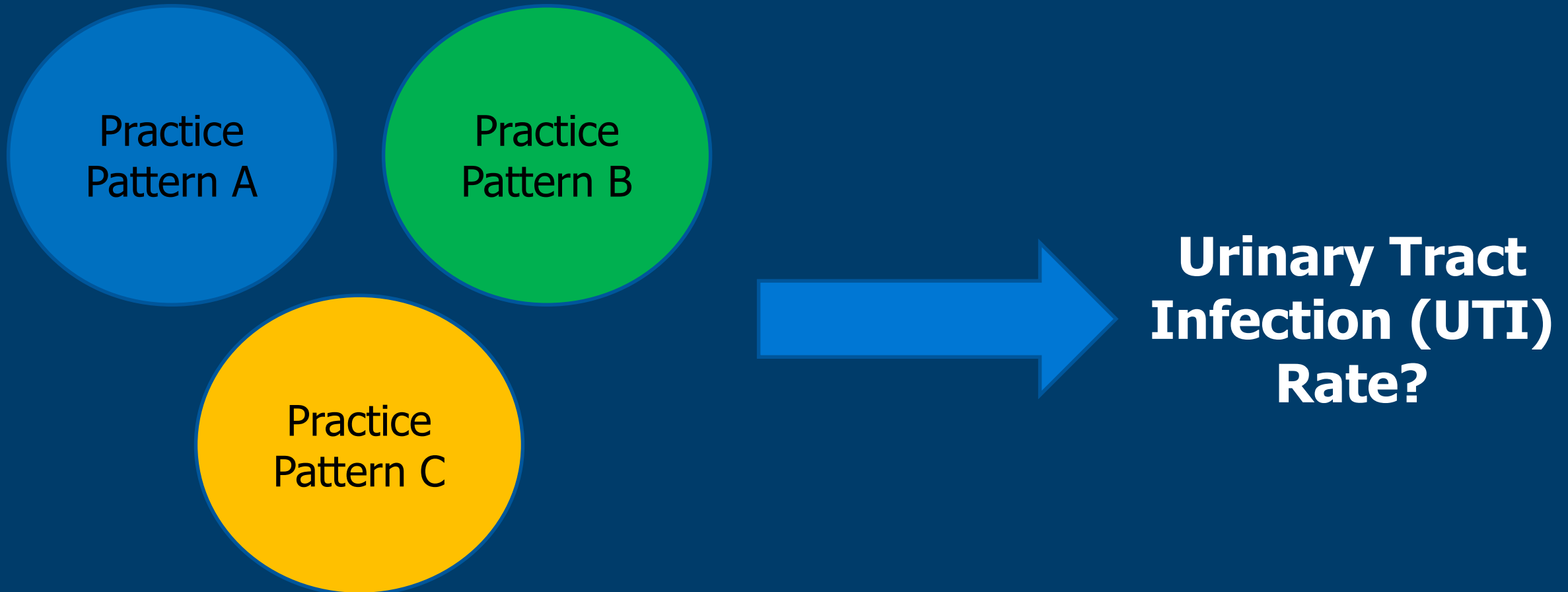
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Disclosures

- None

Variability in Surgeon Use of Urine Cultures and Antibiotics with RALP



Retrospective Review Jan 2014- Oct 2018

N=190

Excluded

Vesicoureteral reflux (N=18)

Inadequate F/U (N=9)

Older than 18 years (N=7)

Other (N=4)

N=152*
included in
analysis

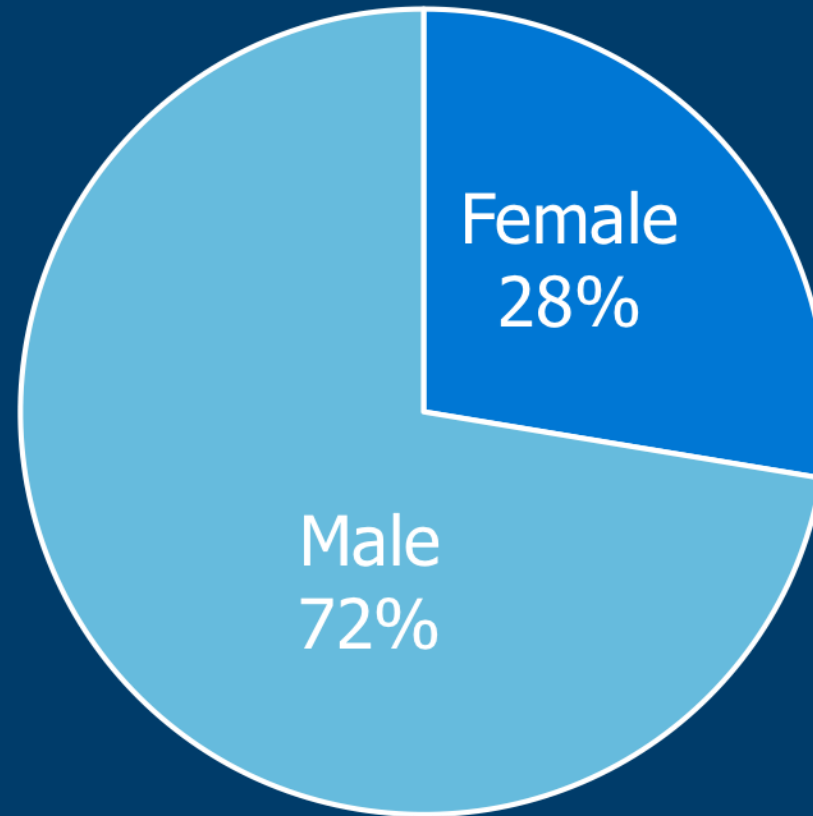
Urinary tract infection

- Fever or urinary symptoms
- Positive urinalysis
- Positive urine culture with $\geq 10^5$ colony of single uropathogen
- Tracked until 60 days after stent removal

*One patient with re-operative pyeloplasty, yielding 153 surgical encounters

Cohort Demographics

Sex

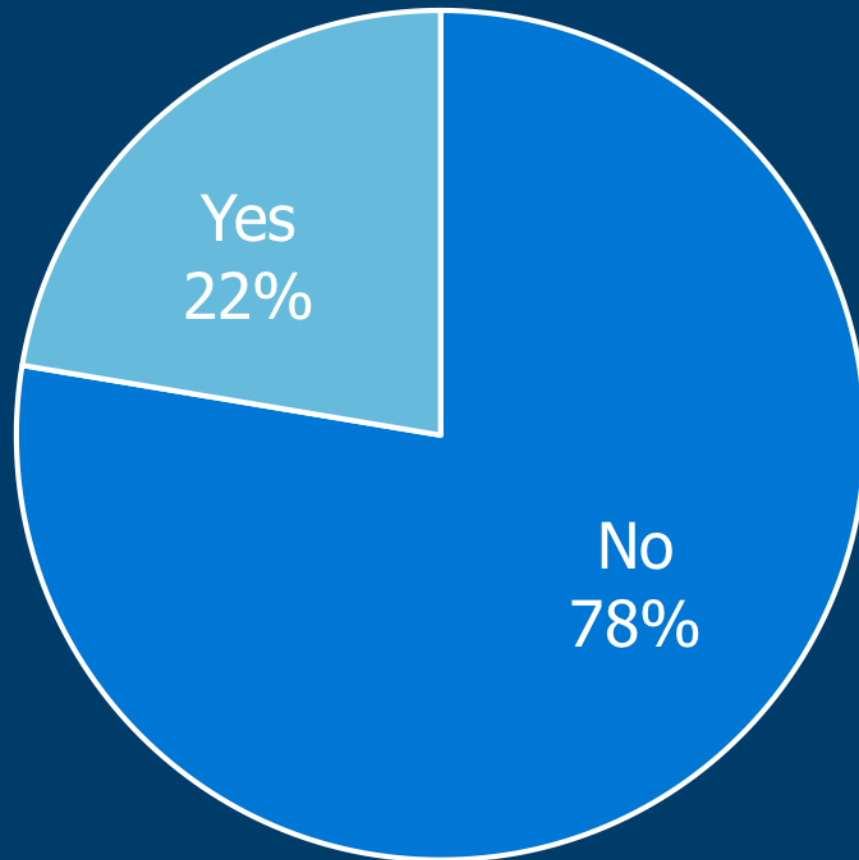


Circumcision Status

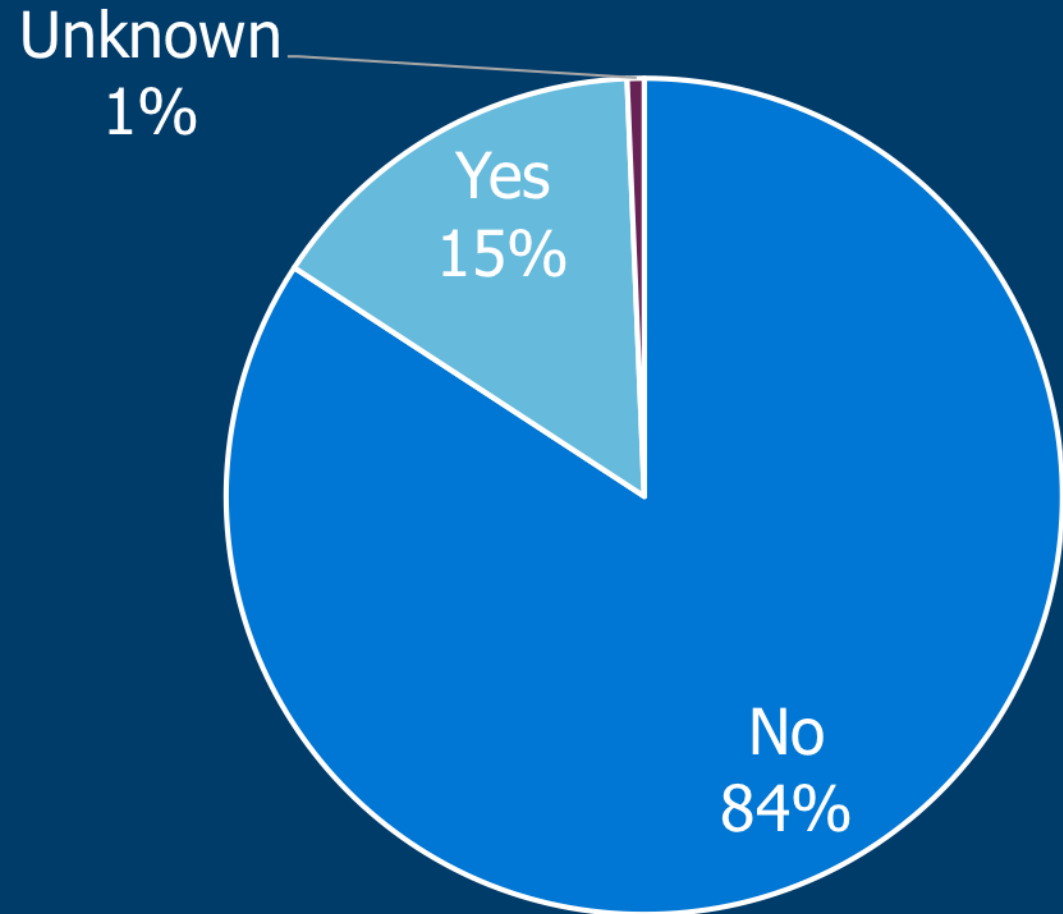
- Uncircumcised 22%
- Circumcised 73%
- Unknown 5%

Cohort Demographics

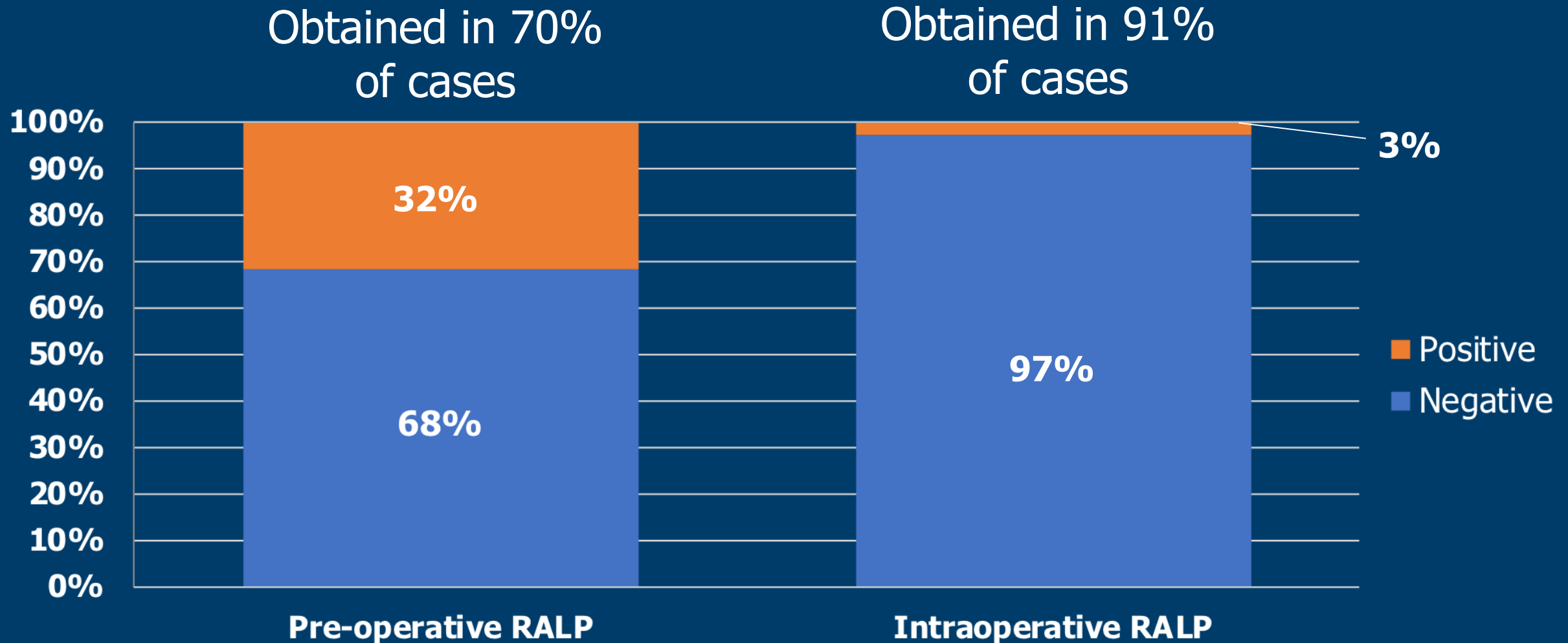
History of UTI



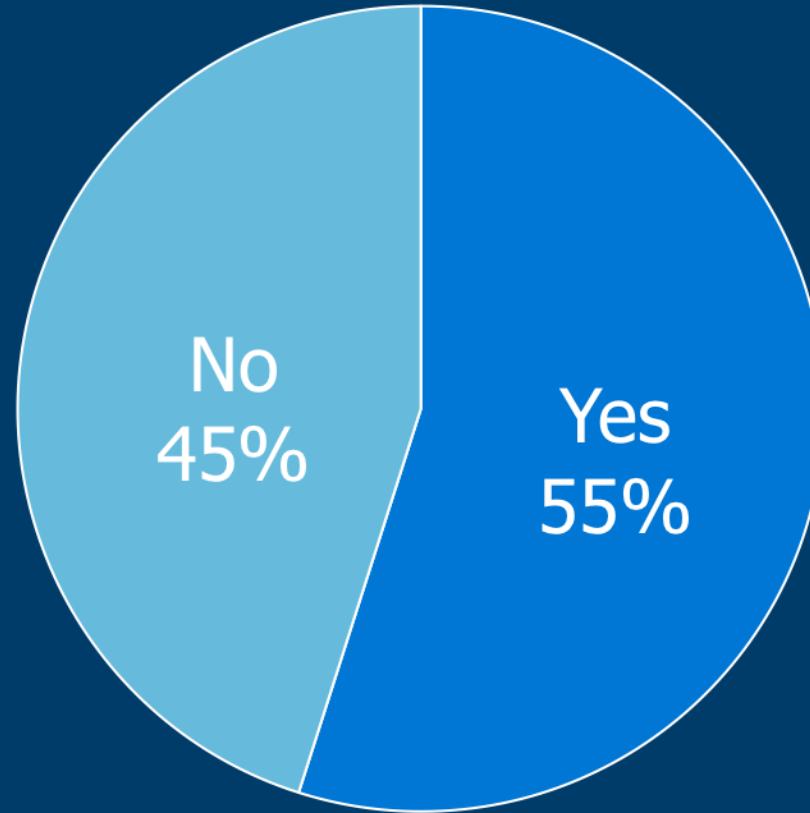
On Antibiotic Prophylaxis



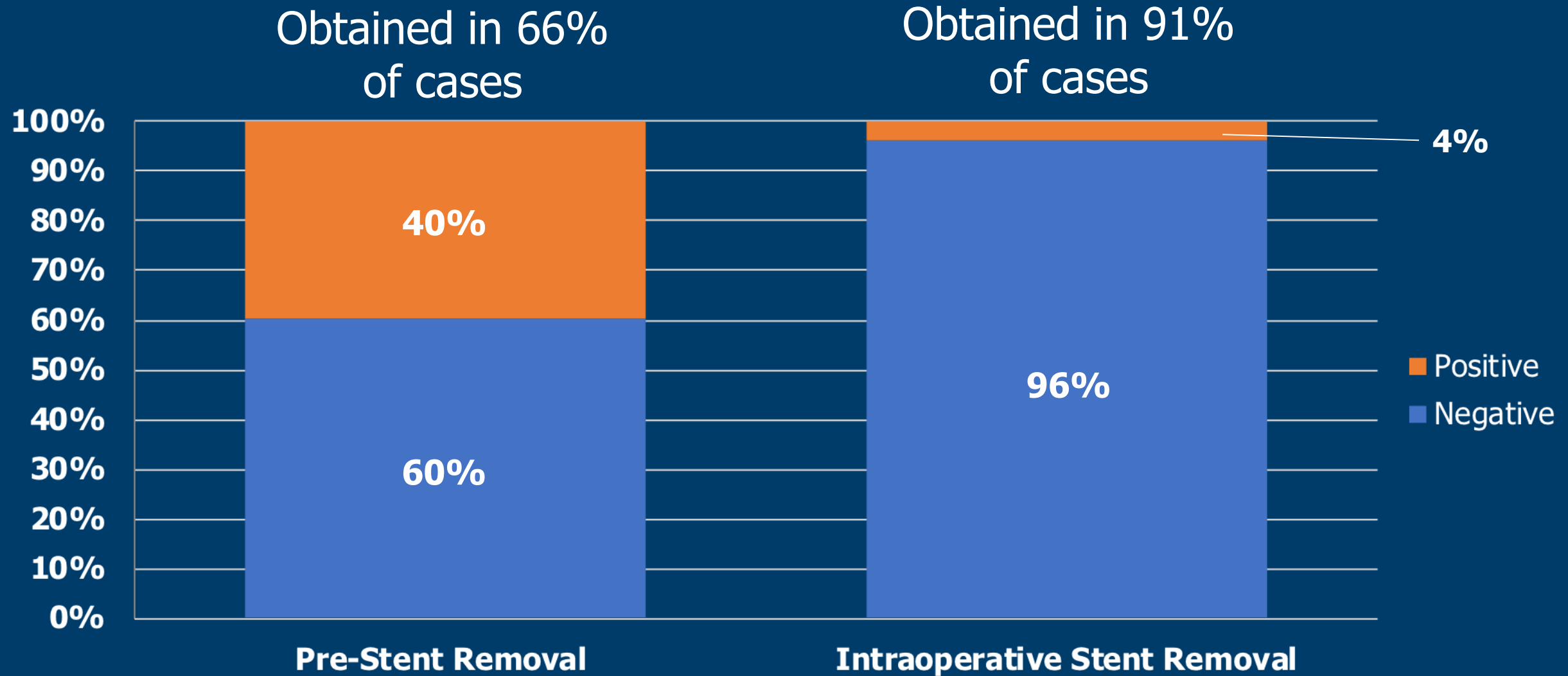
Peri-RALP Urine Culture Use and Results



Post-RALP Antibiotics Prescribed



Peri-Stent Removal Urine Culture Use and Results



Post-RALP Urinary Tract Infections

Total Post-RALP UTI: 8/153 (5.2%)

Factors associated with post-RALP UTI

- Uncircumcised status
- Pre-operative chronic prophylaxis
- Pre-operative RALP Ucx/UA
- Intra-operative stent removal Ucx/UA

Factors NOT associated with post-RALP UTI

- Use of Post-operative RALP antibiotics
- Intra-operative RALP cultures
- Pre-operative stent removal Ucx/UA

Limitations

- UTI rate was too low for multivariable analysis

Take Away Points and Future Direction

- Post-RALP antibiotic use did not affect UTI rate
- Certain patients with risk factors (uncircumcised status, on chronic prophylaxis, and positive pre-RALP urine culture) may benefit from post-RALP antibiotics
- Data will be used to improve our robotic care pathway to reduce use of urine culture and post-RALP antibiotics