A NEW-TO-MARKET SINGLE-USE URETEROSCOPE: Urologist Performance Rating and Capability Assessment

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Objectives:

Since 2011, single-use (SU) flexible ureteroscopes have been an available alternative to traditional reusable (RU) ureteroscopes with the aim of combatting rising repair and infection issues, common throughout endoscopy specialties. Despite many SU ureteroscope options available, adoption remains combatted by performance concerns1. The purpose of this study was to evaluate the performance of the aScope 5 Uretero SU ureteroscope platform.

Methods:

- From July to September 2024, 61 procedures using the aScope 5 Uretero flexible single-use ureteroscope were completed by 20 urologists in academic medical centers, community hospitals and surgery centers across the United States.
- After each procedure, urologists completed a survey to evaluate their experience and assess the performance of the aScope 5 Uretero system.
- A 5-point qualitative scale was used to rate the performance from 'Very poor' (1) to 'Very good' (5) and converted to a numerical scale for analysis.
- A one-sample t-test was run to measure the significance of the aScope 5 Uretero ratings.

Results:

- The aScope 5 Uretero system received high ratings across each metric captured, with mean performance ratings of 4.0 or higher for each.
- More than 70% of respondents rated the system between 'good' (4) and 'very good' (5) on each metric.
- 34% of respondents reported having experienced availability issues with their current reusable ureteroscope.
- For complete results see Table 1.

Survey Metric	Mean Rating (n=61)	P-value
1 = Very Poor, 2 = Poor, 3 = Acceptable, 4 = Good, 5 = Very Good		
Image Quality	4.4	P < 0.001
Image Quality With Laser	4.0	P < 0.001
Ergonomics (Weight and Feel)	4.8	P < 0.001
Ease of Tool Passage	4.3	P < 0.001
Ability to Aspirate Fluids	4.3	P < 0.001
Maneuverability	4.5	P < 0.001
Torque Transmission	4.4	P < 0.001
Articulation Without Tools	4.6	P < 0.001
Articulation With Tools	4.5	P < 0.001
Performance of Display & Processing Unit	4.4	P < 0.001
Overall Ease of Use & Set Up	4.7	P < 0.001

Table 1. Urologist Performance Rating and Capability Assessment

Do you ever experience procedural delays due to ureteroscope availability issues? (n=61)

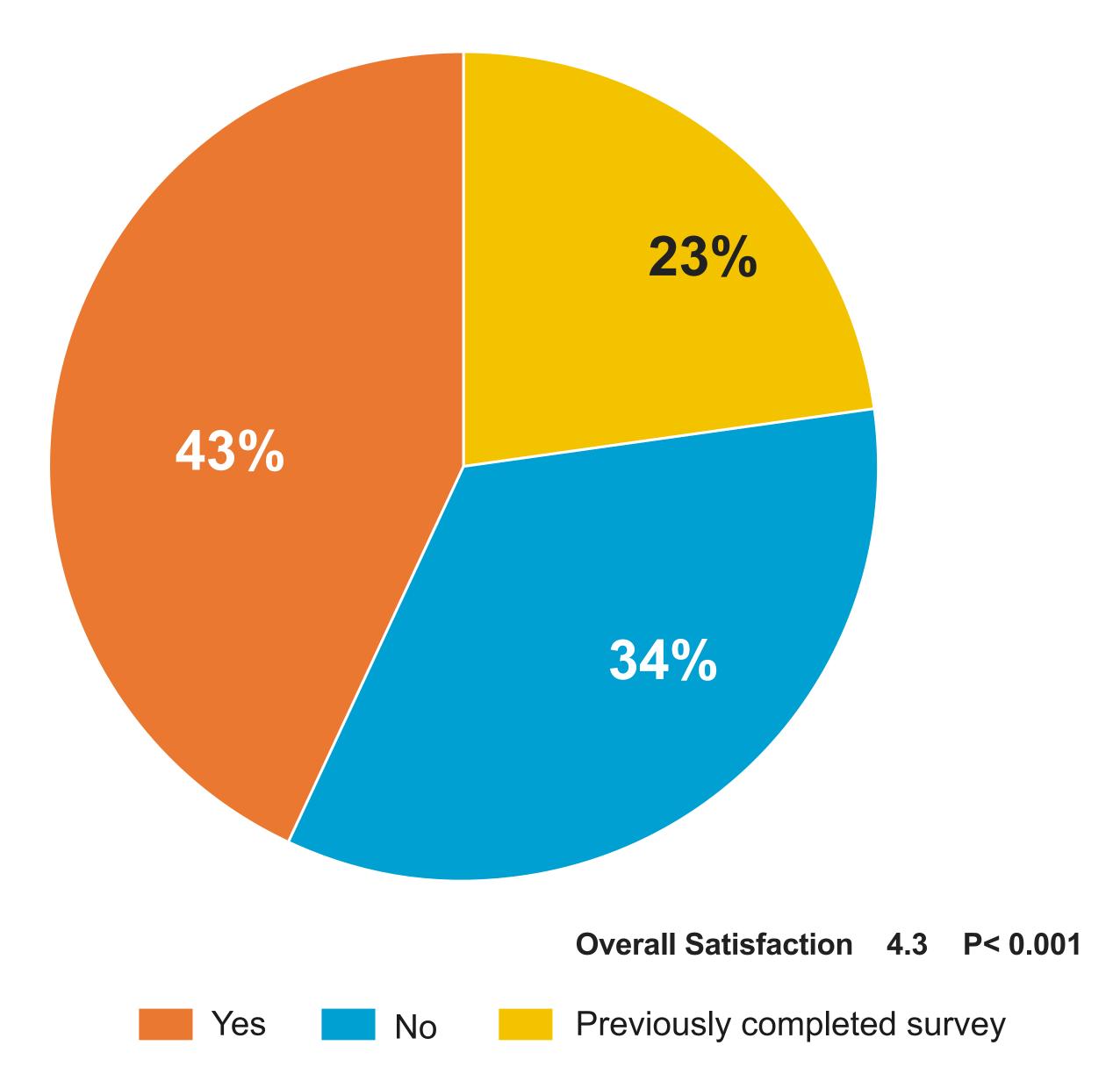


Figure 1. Percent of Respondents noting Scope Availability Issues

Discussion:

- The aScope 5 Uretero scored significantly high ratings across each performance metric.
- The new-to-market single-use aScope 5 Uretero may provide urologists with a high-performing flexible ureteroscope that streamlines procedural workflow and resource utilization.
- The single-use nature of the aScope 5 Uretero means the flexible ureteroscope is brand new for every procedure and is not subject to reprocessing or repairs, meaning delays of reusable flexible ureteroscopes may be mitigated or eliminated, for a streamlined workflow.
- Users of flexible ureteroscopes should evaluate the performance of all the available single-use alternatives available, to ensure the ureteroscope performance fits their needs.
- Facilities should review all associated costs with reusable flexible and single-use ureteroscopes to build out the appropriate fleet for their caseloads.

Conclusion:

The novel SU ureteroscope performed well across flexible ureteroscopy procedures and received high performance ratings by urologists. As with previously published urologist feedback on this device, this study demonstrated that the aScope 5 Uretero remains highly rated by users and provides a safe and readily available alternative to better treat patients.

References

- 1. Haislip I, Cool C. HSD92 the evolution of single-use Ureteroscope use in the United States. Value in Health. 2024;27(12). doi:10.1016/j.jval.2024.10.1775
- 2. Winoker J, Cool C, Haislip I. MT42 evaluation of a novel single-use ureteroscope: User satisfaction & comparison survey. Value in Health. 2024;27(6). doi:10.1016/j.jval.2024.03.1580