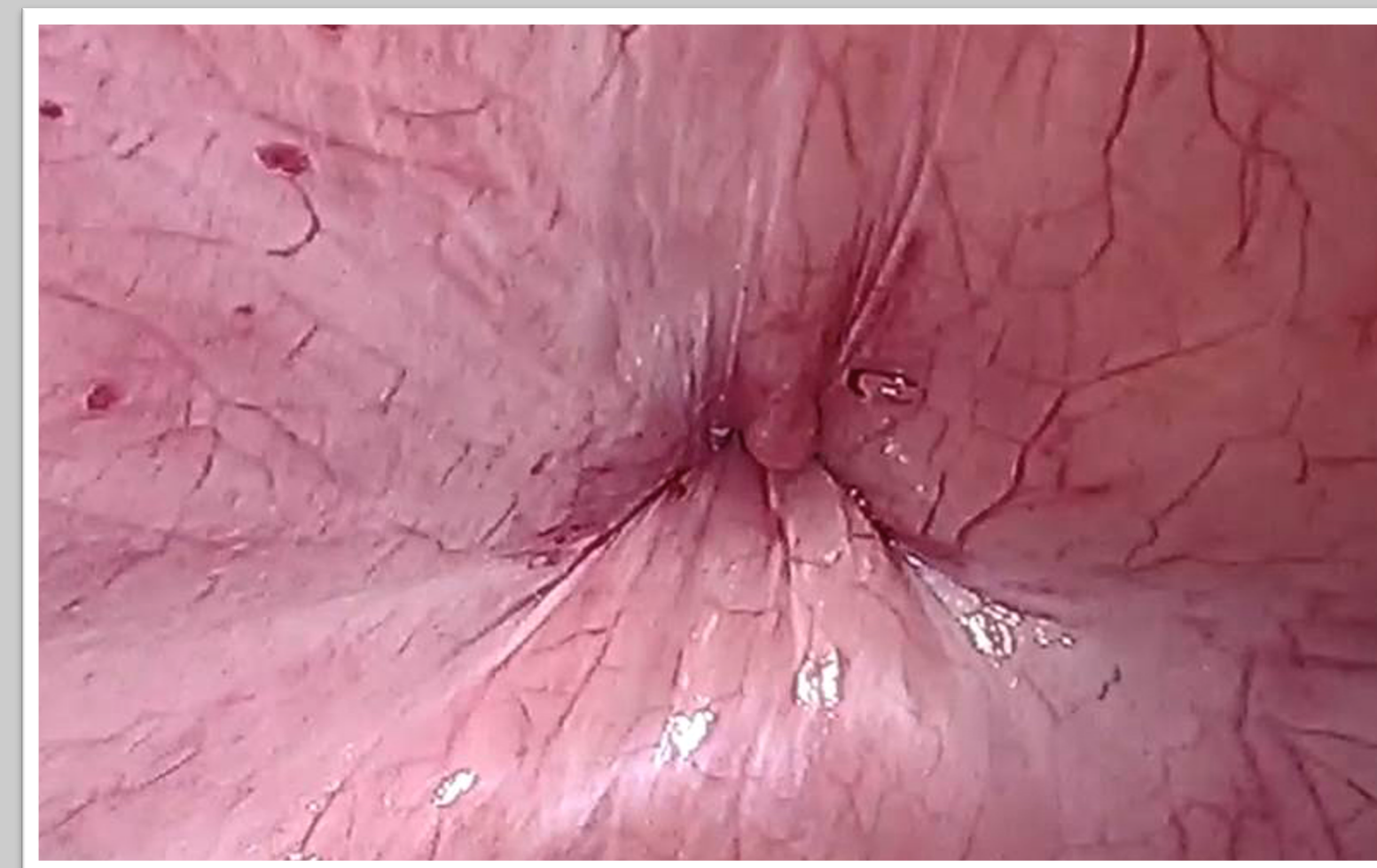
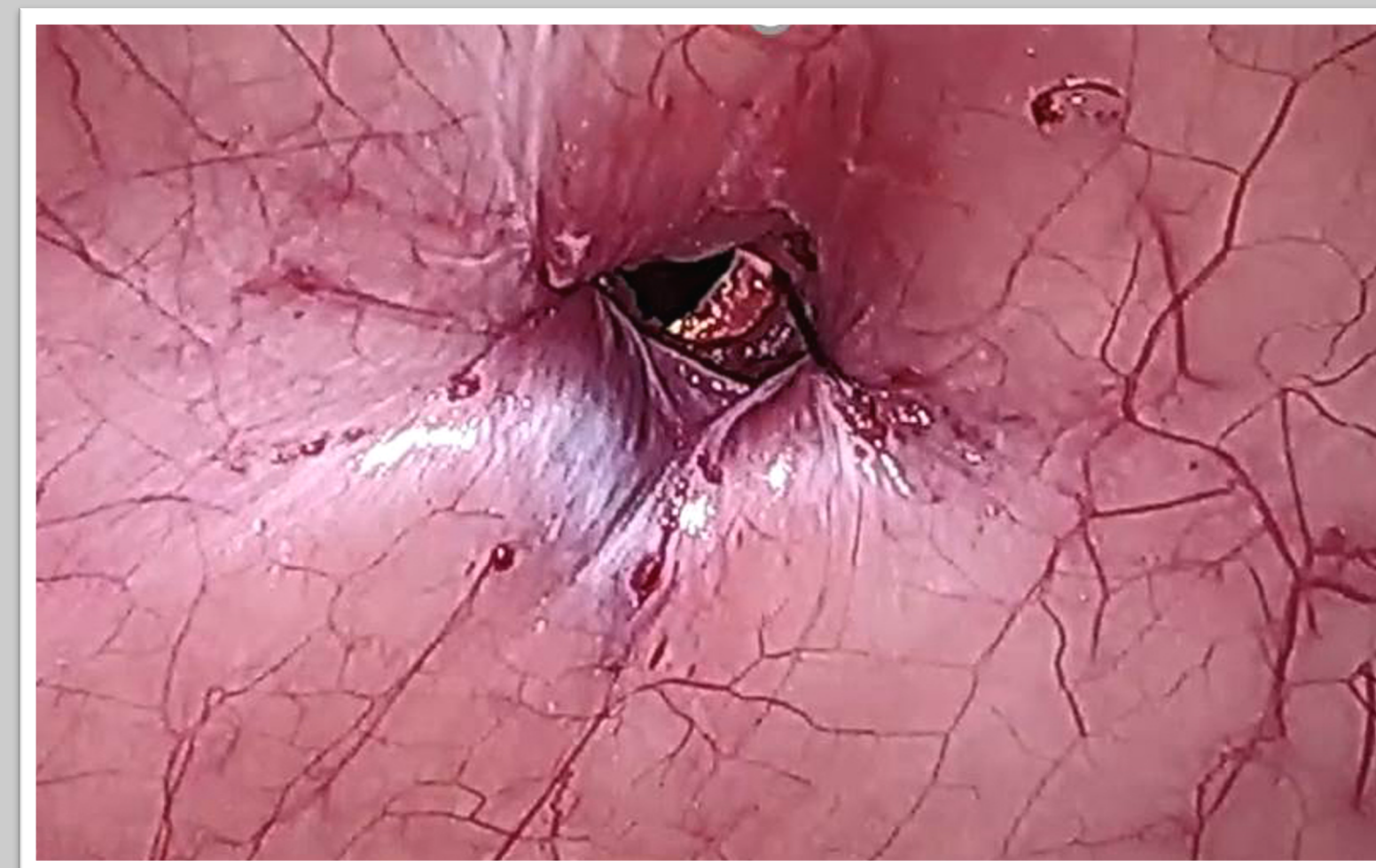
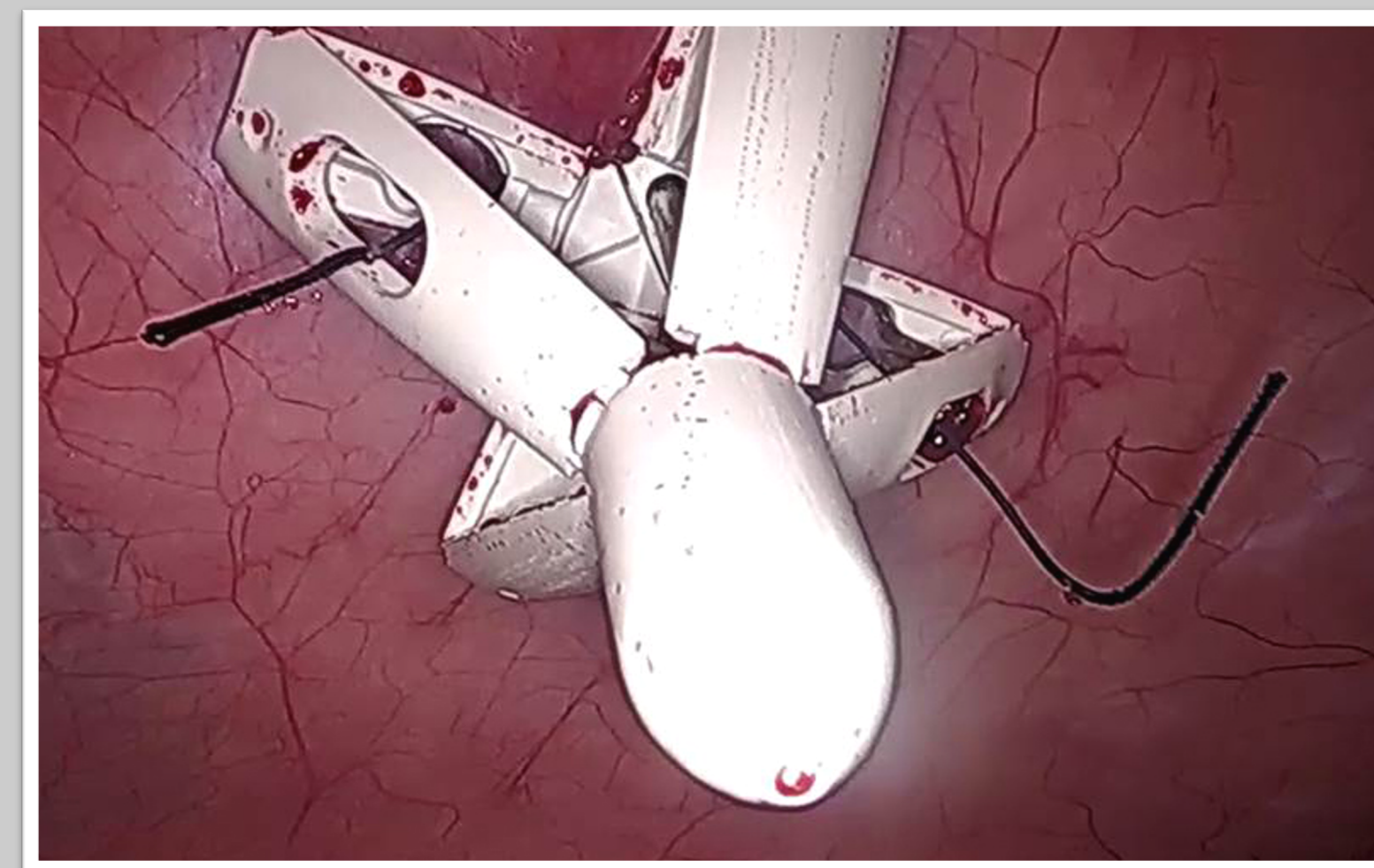
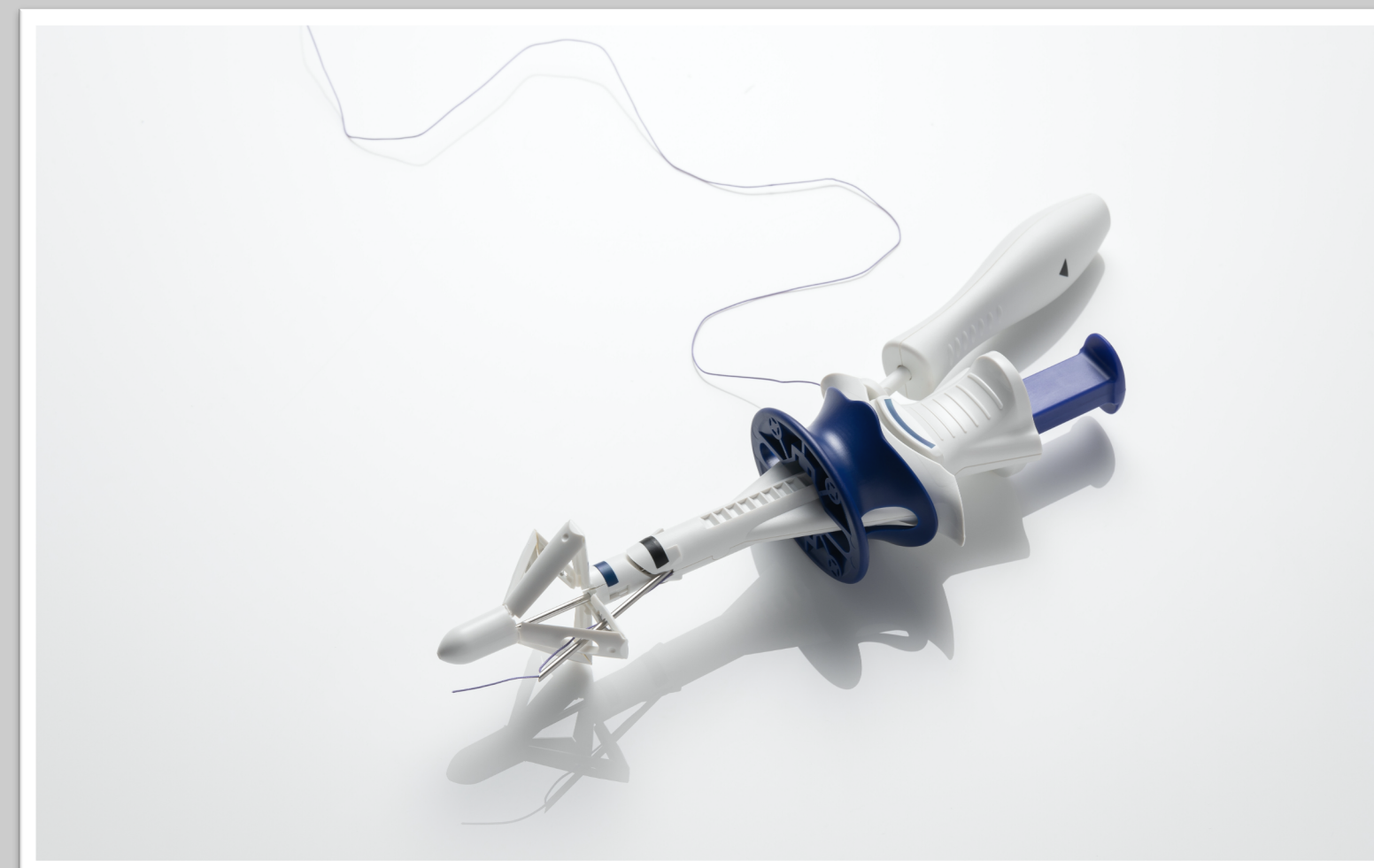


Abstract 1386

USER PREFERENCE STUDY OF A NOVEL DEVICE FOR LAPAROSCOPIC PORT SITE WOUND CLOSURE

Kirby Tran, MD, MMM



INTRODUCTION

Port site closure after laparoscopic surgery must go smoothly, or the risk for hernia will increase, particularly among obese patients. Historically, closure has been frustrating and time-consuming, requiring a surgeon and assistant to “fish” for sutures. When a device was developed to address these challenges, a user preference study gauged surgeons’ response to its ease of use, efficacy, safety, and ability to close a range of abdominal thicknesses.

METHODS

After training, 15 surgeons (4 gynecologists, 5 general surgeons, 6 urologists) used the device to close 64 port site wounds in 45 laparoscopic surgeries. The surgeons completed a comprehensive questionnaire in each procedure to explain case details, evaluate the ease of use at multiple points during closure, and report on the device’s safety and efficacy on the Likert scale.

RESULTS

Surgeons reported that all port sites were closed successfully and quickly (median time: 1.5 minutes). The device enabled single-operator suturing, regardless of patient weight. Surgeons agreed most strongly that the device:

- Provided 180-degree suturing
- Provided effective closure with sufficient suture “bite” on fascia
- Was easy to use and eliminated user variability

CONCLUSION

The port site closure device can fulfill an unmet need in abdominal laparoscopy by allowing a single operator to close wounds safely, quickly and effectively, even in challenging cases. It has the potential to reduce the incidence of port site hernias, reduce surgeon frustration and shorten surgery times.

Likert Scale of Potential Device Benefits

Potential Benefits of Device	Likert Scale (5= Strongly Agree; 1 = Strongly Disagree)
Device provides 180-degree placement of sutures	4.92
Device provides effective closure	4.88
The device is easy to use	4.86
Device provides sufficient suture bite on fascia	4.85
Device eliminates user variability	4.83
The device provides stabilization during closure	4.82
Device saves time compared to what I used today	4.64
Device prevents CO2 Leakage during closure	4.64
One operator can perform closure without assistant help	4.25