

Splenic Bleeding during SG

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XXVII IFSo World Congress

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Conflicts of Interest

- Intuitive – consultant, travel stipend
- Medtronic - consultant, travel stipend
- Moon Surgical - consultant, travel stipend

Splenic bleeding during SG

- Bleeding is 0.6% of SG in the MBSAQIP
- SLR is protective



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SURGERY FOR OBESITY
AND RELATED DISEASES

Original article

Predictors and outcomes of bleed after sleeve gastrectomy: an analysis of the MBSAQIP data registry

Valentin Mocanu, M.D.^{a,*}, Jerry Dang, M.D.^a, Farah Ladak, M.P.H, M.D.^a,
Noah Switzer, M.P.H., M.D, F.R.C.P.C.^a, Daniel W. Birch, M.Sc., M.D., F.R.C.S.C.^{a,b},
Shahzeer Karmali, M.P.H., M.D., F.R.C.S.C.^{a,b}

Table 2
 LSG complications in patients with and without a bleed

	<u>Nonbleed</u>	<u>Bleed</u>	<i>P</i> Value
	n = 174,237	n = 1116	
Mortality	122 (.07)	11 (.99)	<.001
Serious complication	3568 (2.1)	-	
Any complication	4366 (2.5)	-	
Cardiac complication	84 (.1)	17 (1.5)	<.001
Pneumonia	198 (.1)	18 (1.6)	<.001
AKI	153 (.09)	33 (3.0)	<.001
Pulmonary embolus	428 (.3)	13 (1.2)	<.001
Deep SSI	275 (.2)	29 (2.6)	<.001
Wound disruption	47 (.03)	4 (.4)	<.001
Reoperation 30 d	1112 (.6)	352 (31.5)	<.001
Intervention 30 d	1582 (.9)	132 (11.8)	<.001
Readmission 30 d	5320 (3.1)	269 (24.1)	<.001

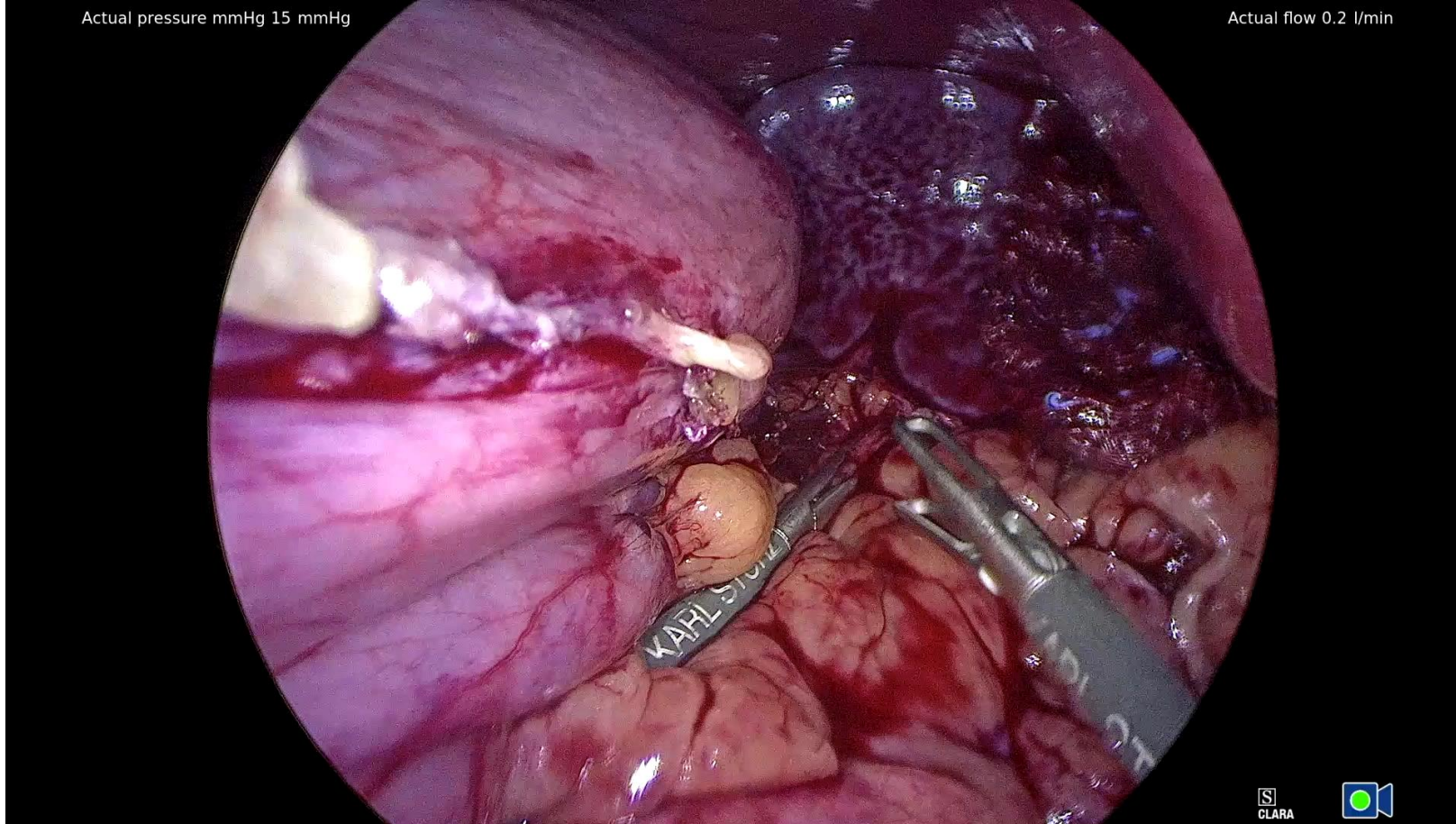
LSG = laparoscopic sleeve gastrectomy; AKI = acute kidney injury;
 SSI = surgical site infection.

Sources of bleeding

- Staple line
- Omentum
- Spleen
- Ab wall

Actual pressure mmHg 15 mmHg

Actual flow 0.2 l/min



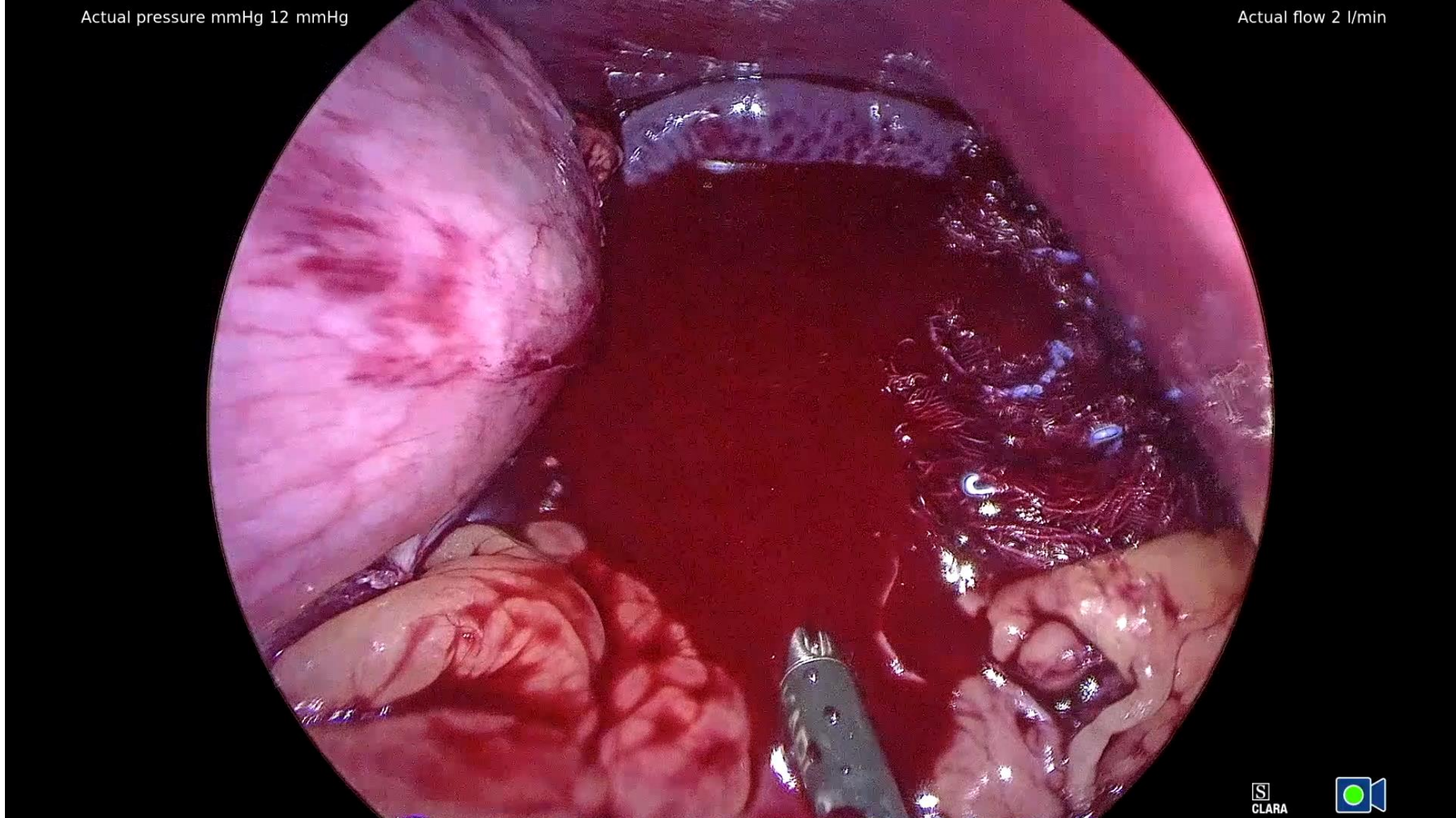
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Actual pressure mmHg 12 mmHg

Actual flow 2 l/min



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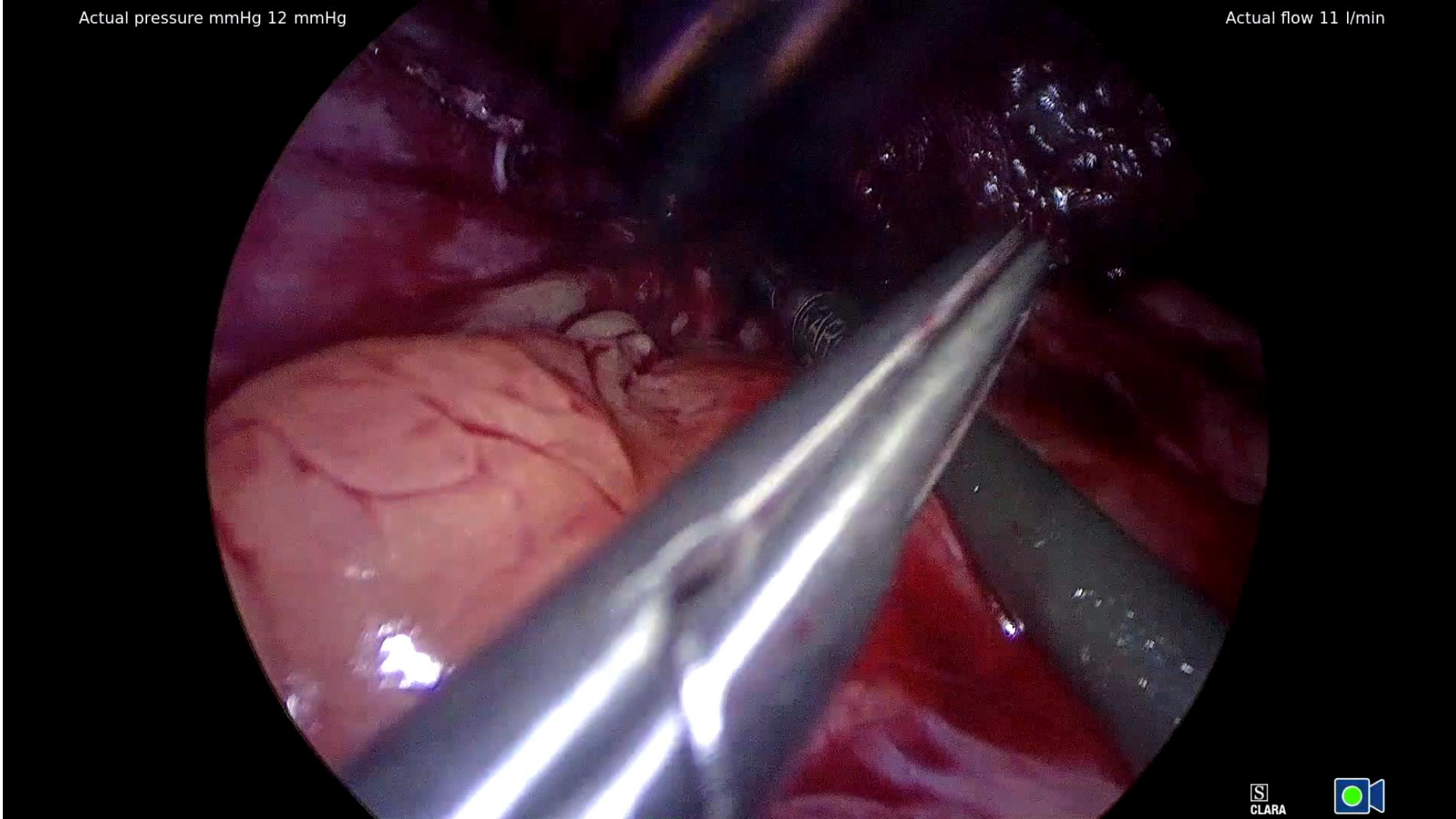
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Actual pressure mmHg 12 mmHg

Actual flow 11 l/min



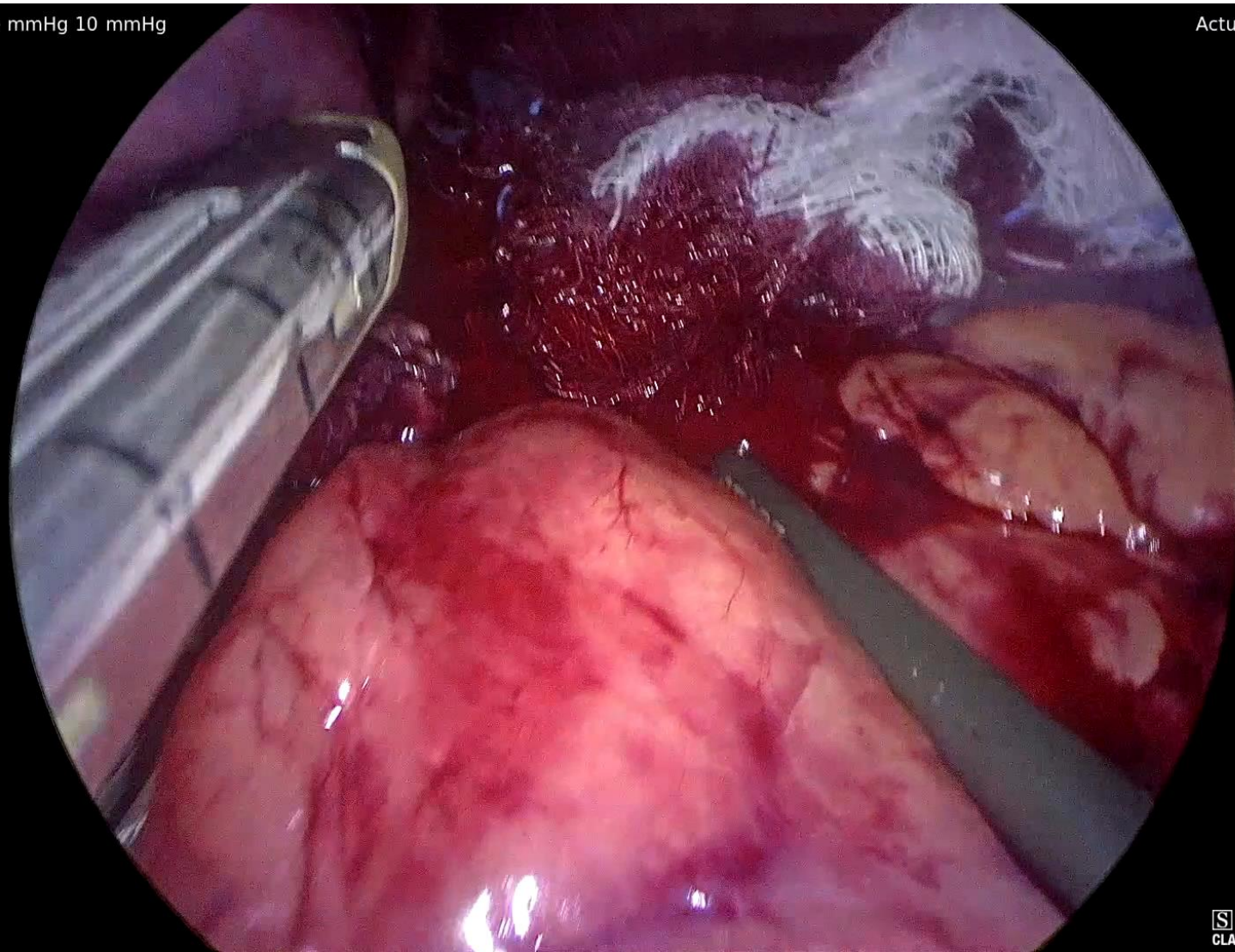
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Actual pressure mmHg 10 mmHg

Actual flow 2 l/min



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CLARA



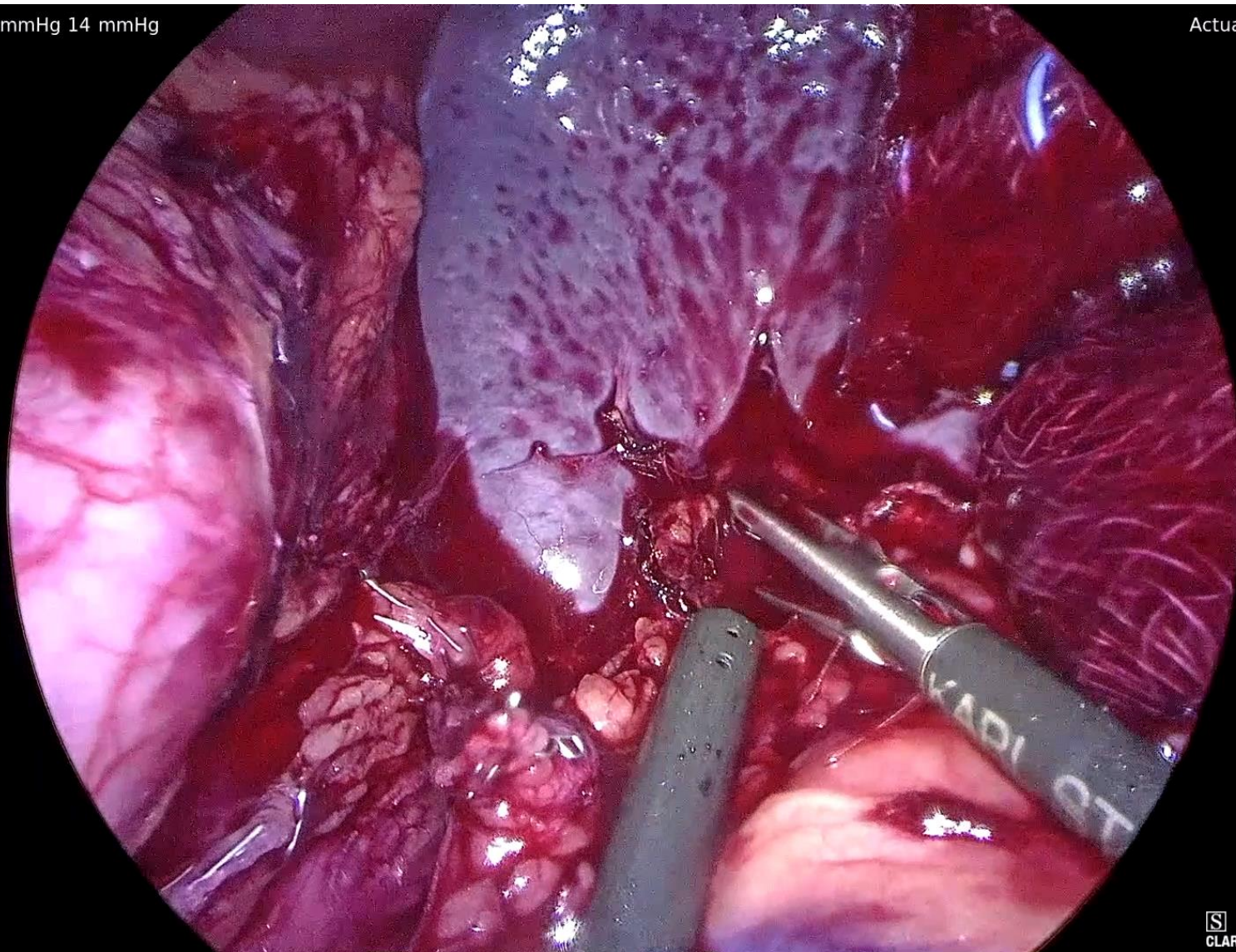
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Actual pressure mmHg 14 mmHg

Actual flow 1 l/min



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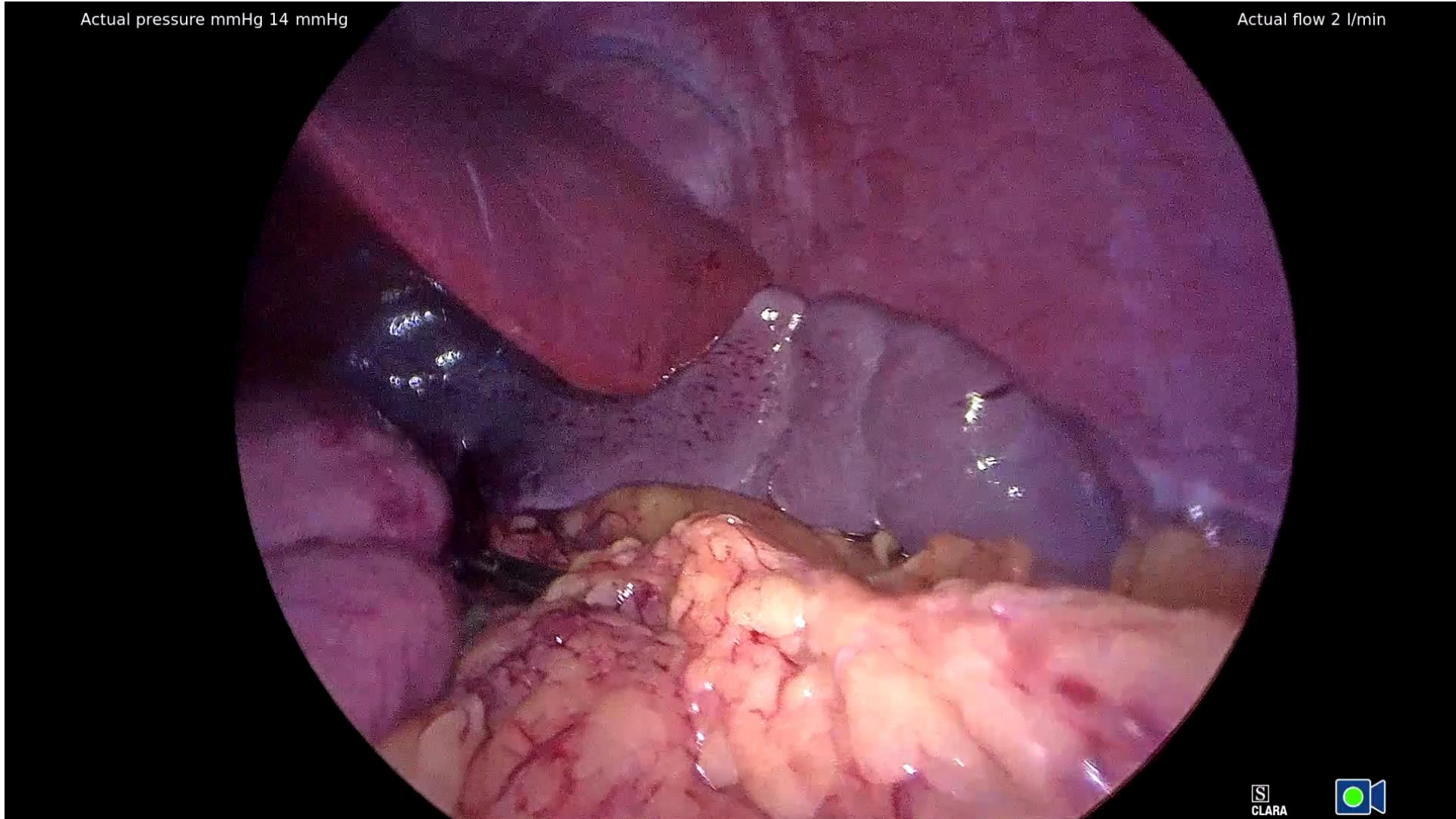
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Actual pressure mmHg 14 mmHg

Actual flow 2 l/min



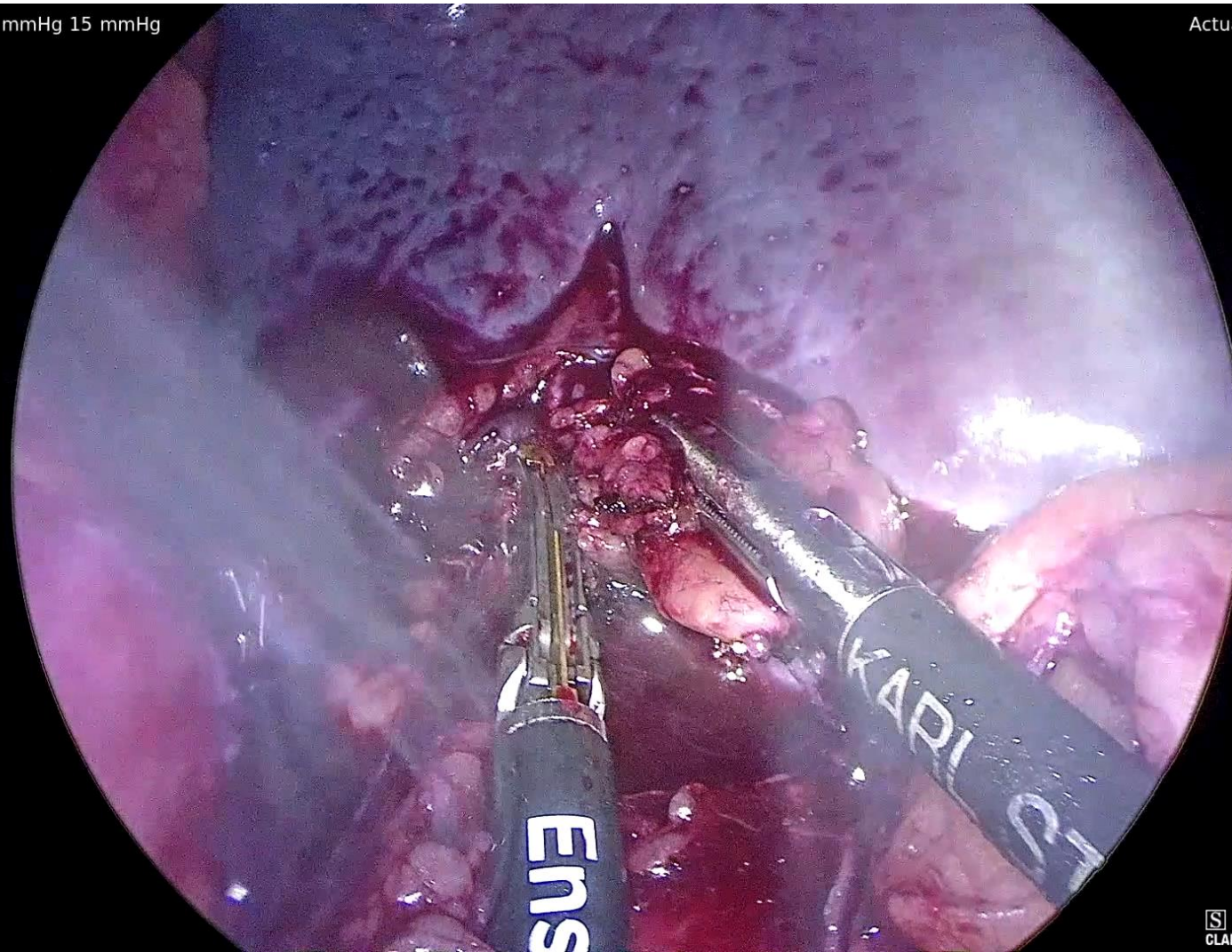
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Actual pressure mmHg 15 mmHg

Actual flow 2 l/min



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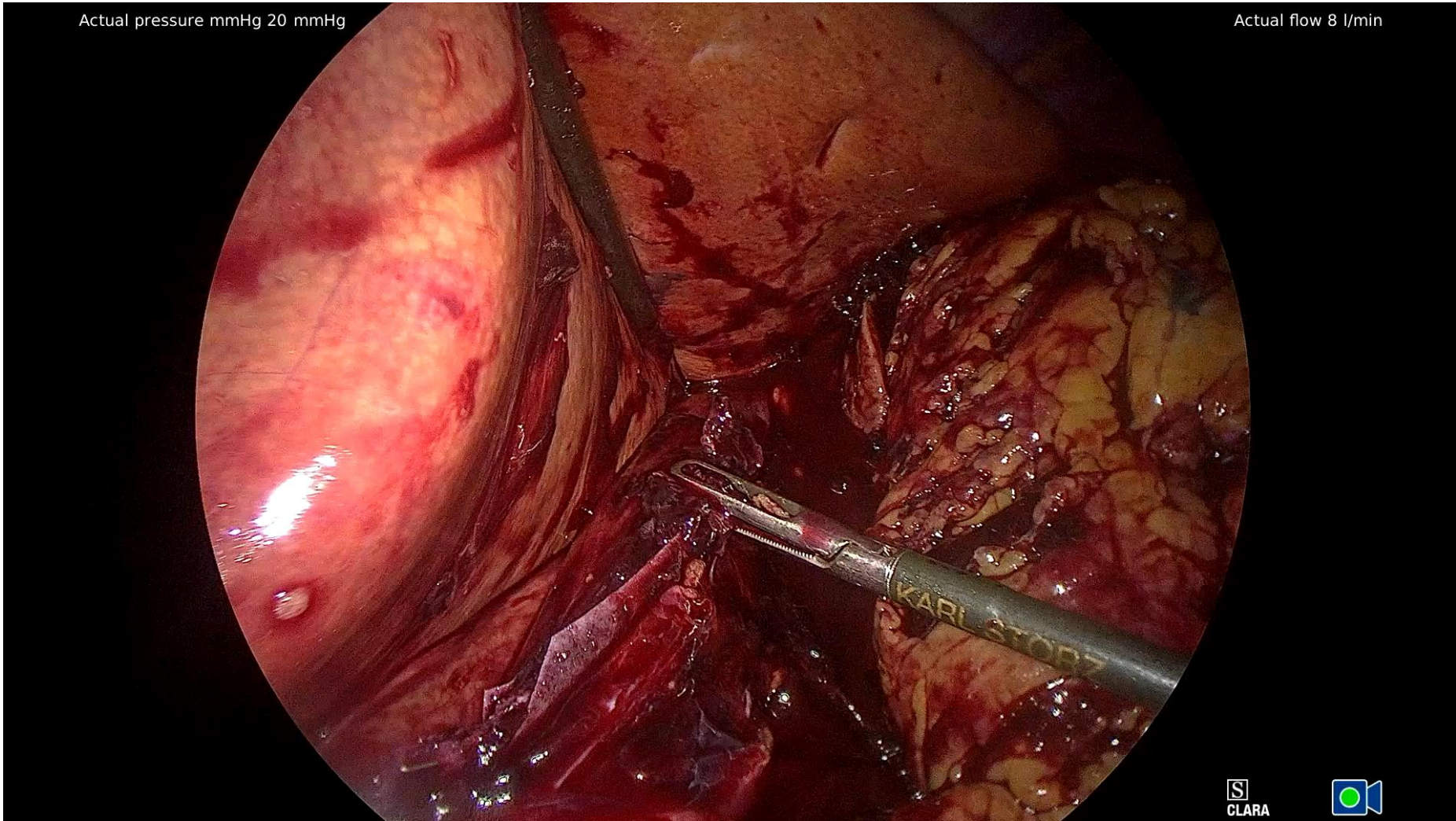
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Actual pressure mmHg 20 mmHg

Actual flow 8 l/min



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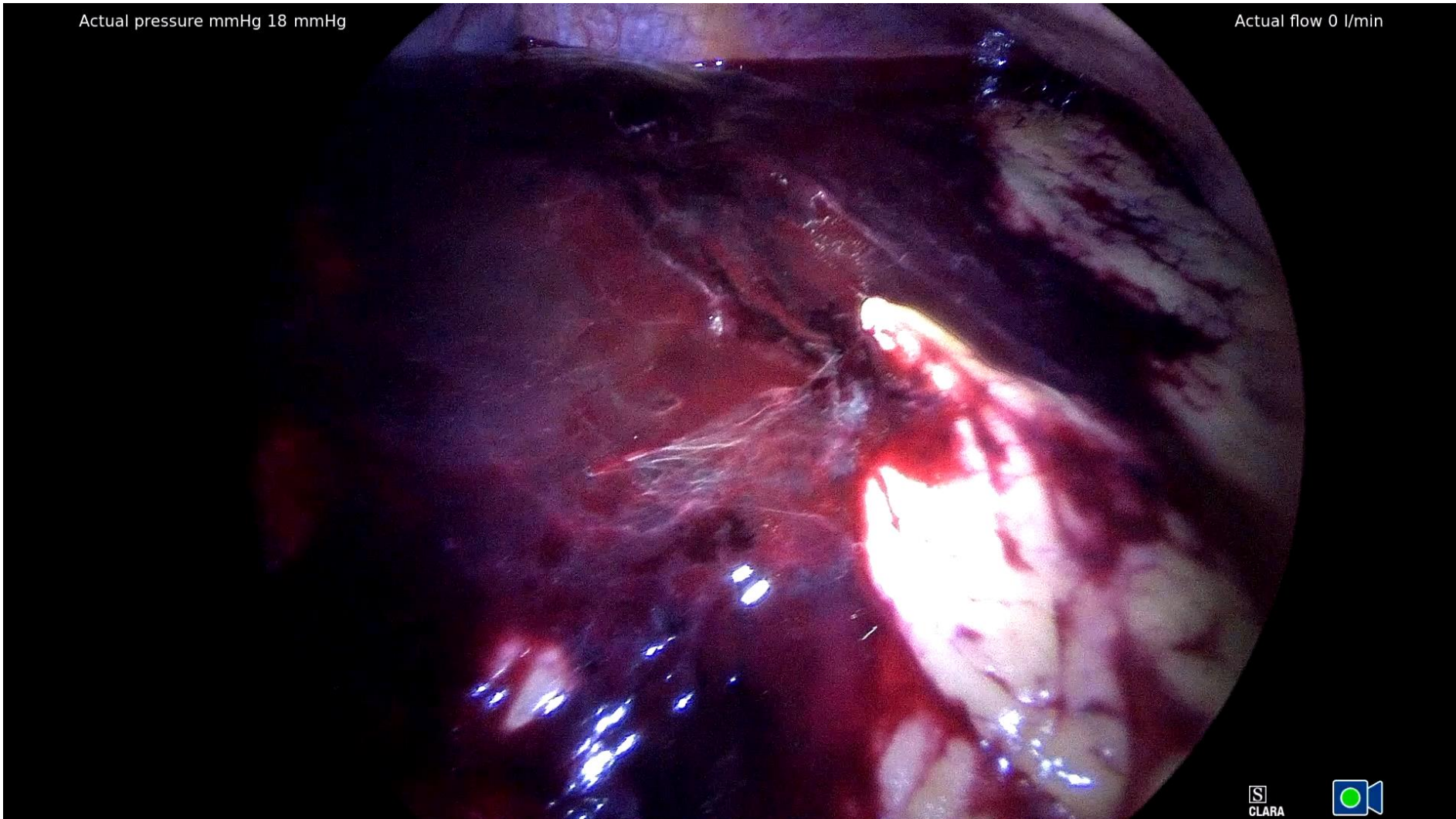
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Actual pressure mmHg 18 mmHg

Actual flow 0 l/min



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Bleeding after SG

- Can be life threatening
- Can be observed
- Prompt exploration in unstable patients
 - Clinical decision
 - Watch H/H
 - Vital signs

Conclusions

- Prompt action often necessary
- Be ready
 - Large suckers
 - Type and cross
 - Be ready to open
- Prevention is best treatment