Laparoscopic transient uterine artery occlusion

by a slip knot in complex myomectomy

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A novel slip knot technique for transient uterine artery occlusion before laparoscopic myomectomy in patients with large myomas.

Aim

To determine whether performing transient occlusion of uterine arteries before laparoscopic myomectomy in patients with large myomas can reduce the intraoperative complications.

Subjects and Methods:

A simple slip knot technique was evaluated for transient occlusion of uterine artery before laparoscopic myomectomy.

Retrospective case-control study

20 laparoscopic myomectomies

10 women underwent laparoscopic myomectomy with transient occlusion of uterine artery (TOUA)

10 control patients underwent laparoscopic myomectomy alone

patients with myomas > 10 cm. in diameter

between March 2007 and January 2014

Surgical outcomes

nerve and vascular injuries

need of blood transfusions

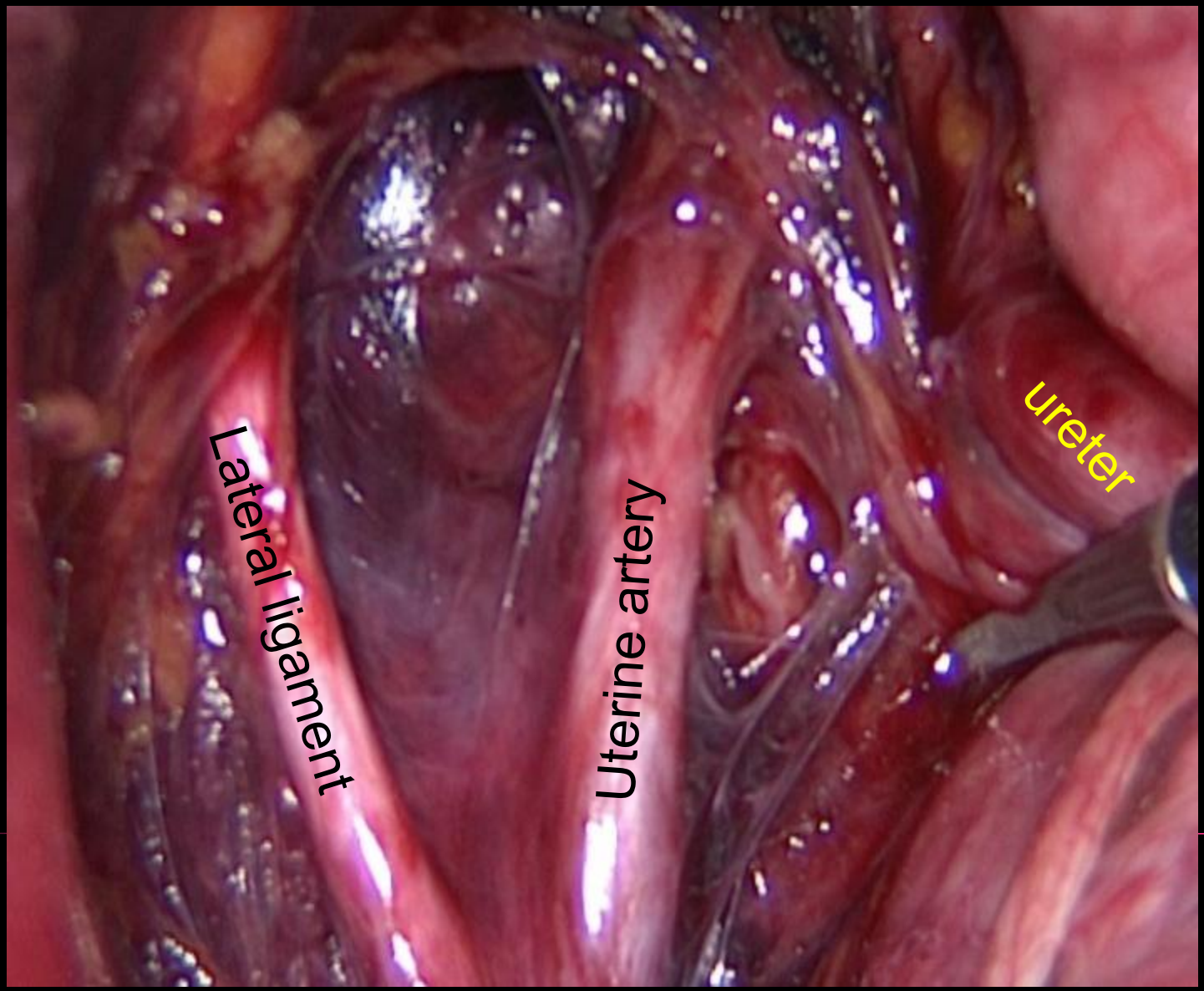
conversion to laparotomy

Results

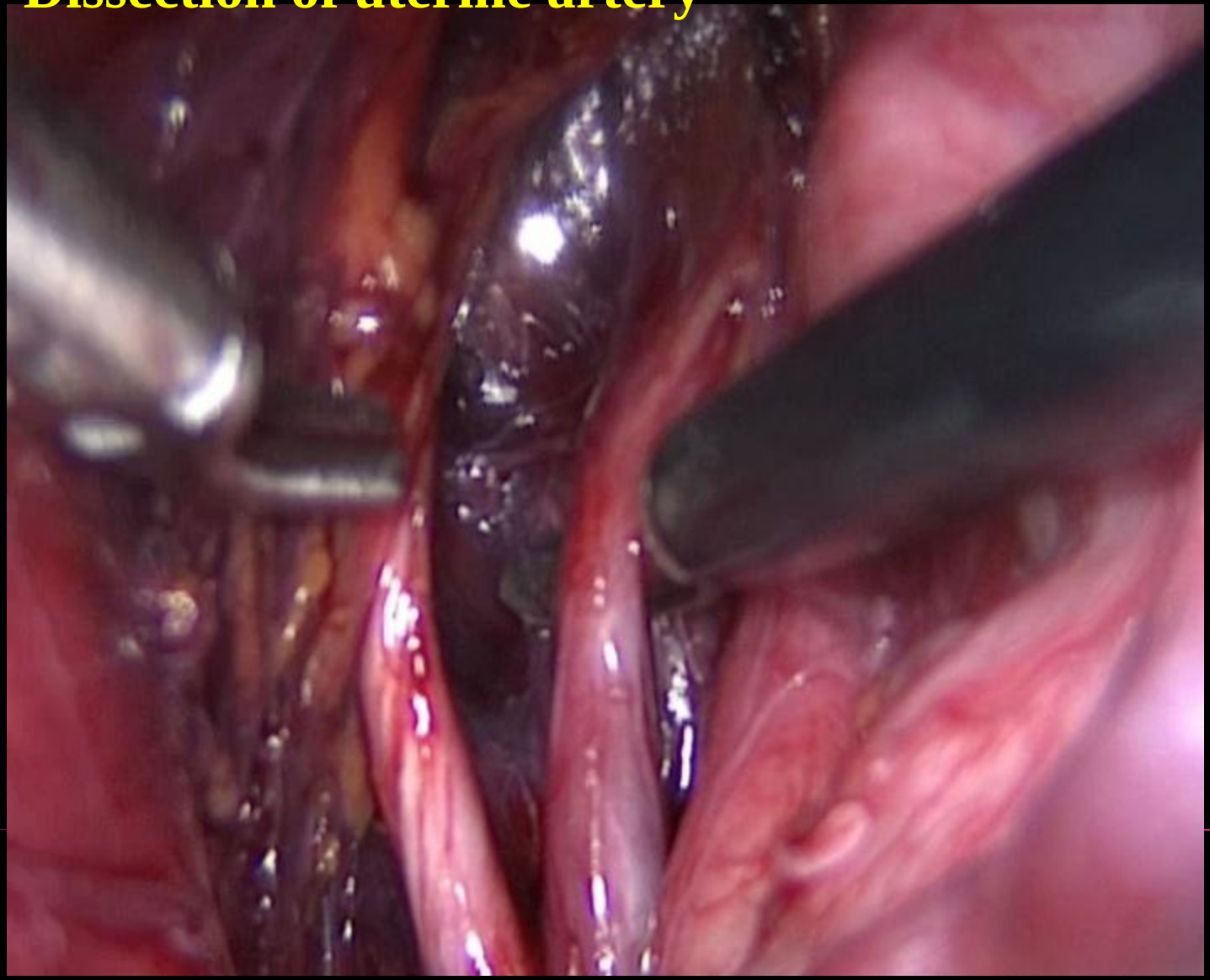
No cases of nerve or vascular injury in both groups

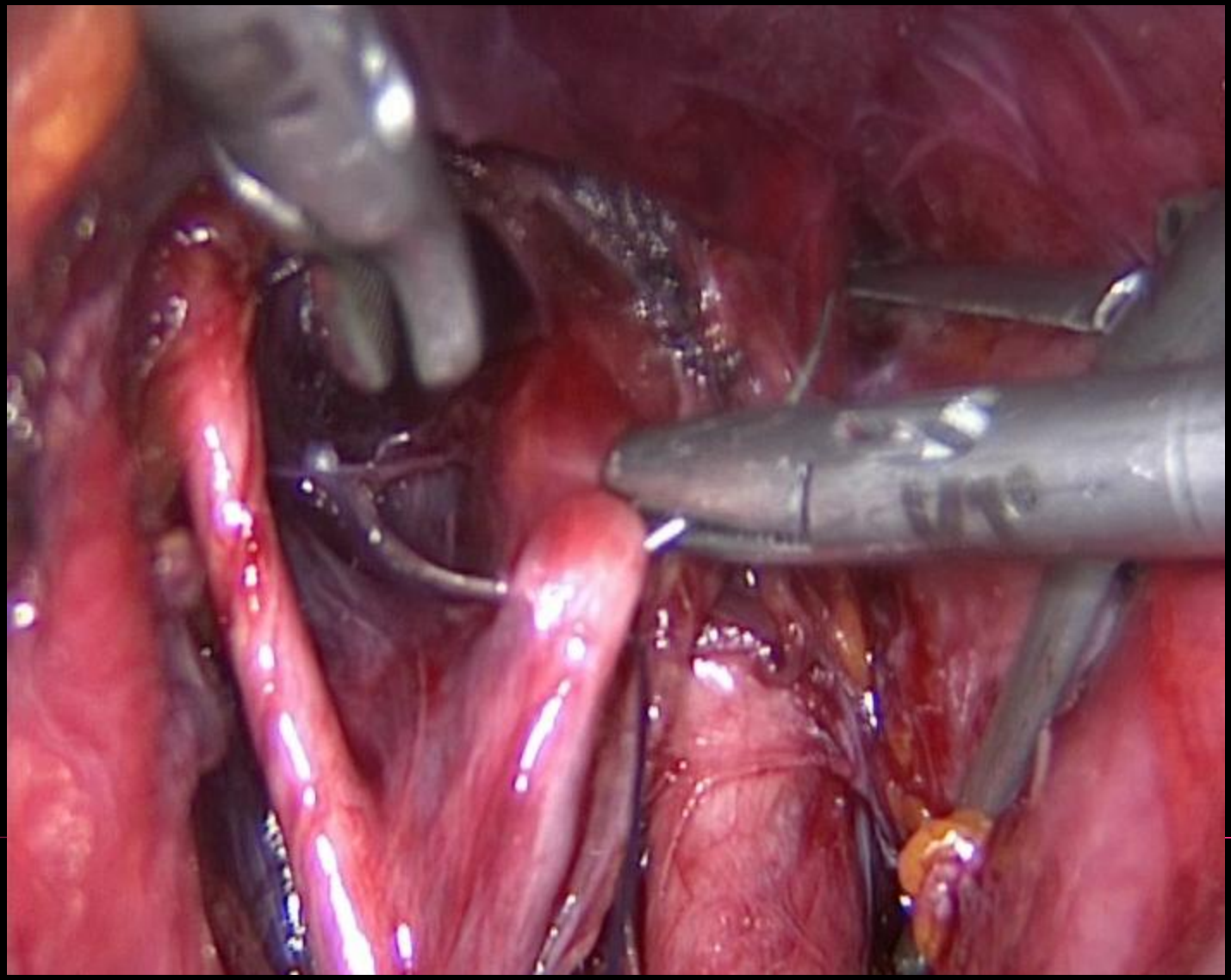
The mean time of TOUA	10 min. for unilateral intervention	
	20 min. for bilateral intervention	
Blood transfusions	in the TOUA group	n=0
	in the controls	n=3
Conversion to laparotomy	in the TOUA group	n=0
	in the controls	n=2

Dissection of retroperitoneal area

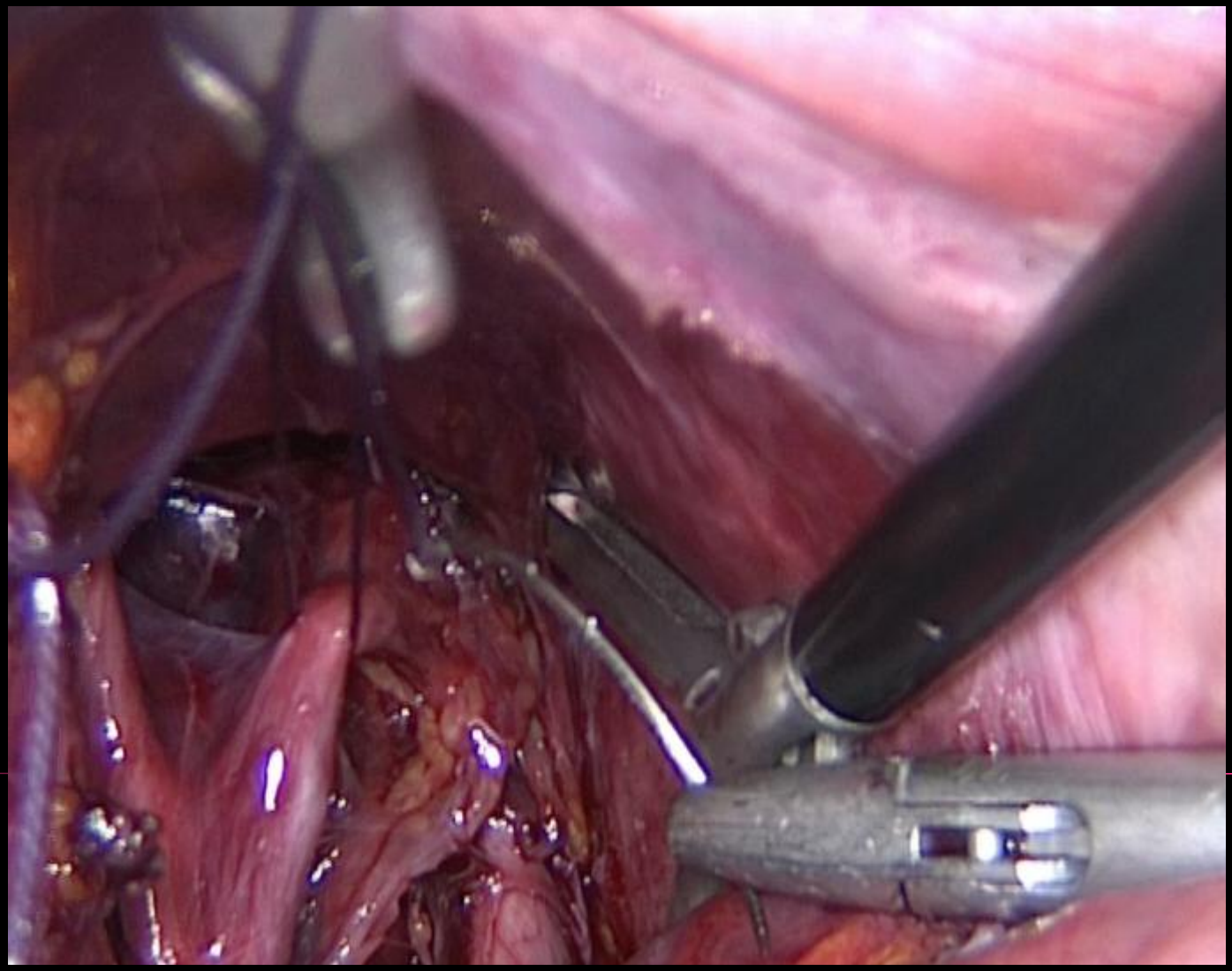


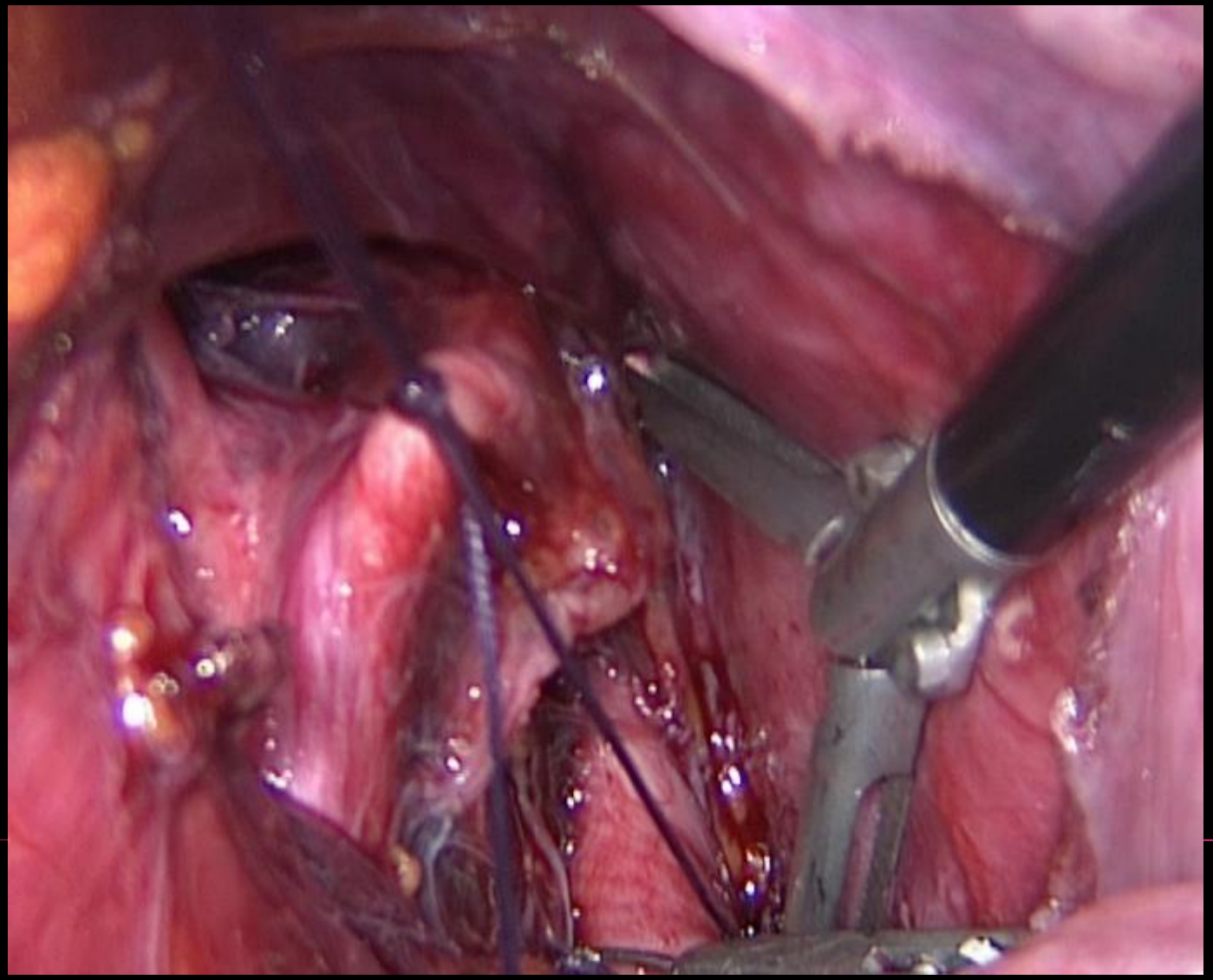
Dissection of uterine artery

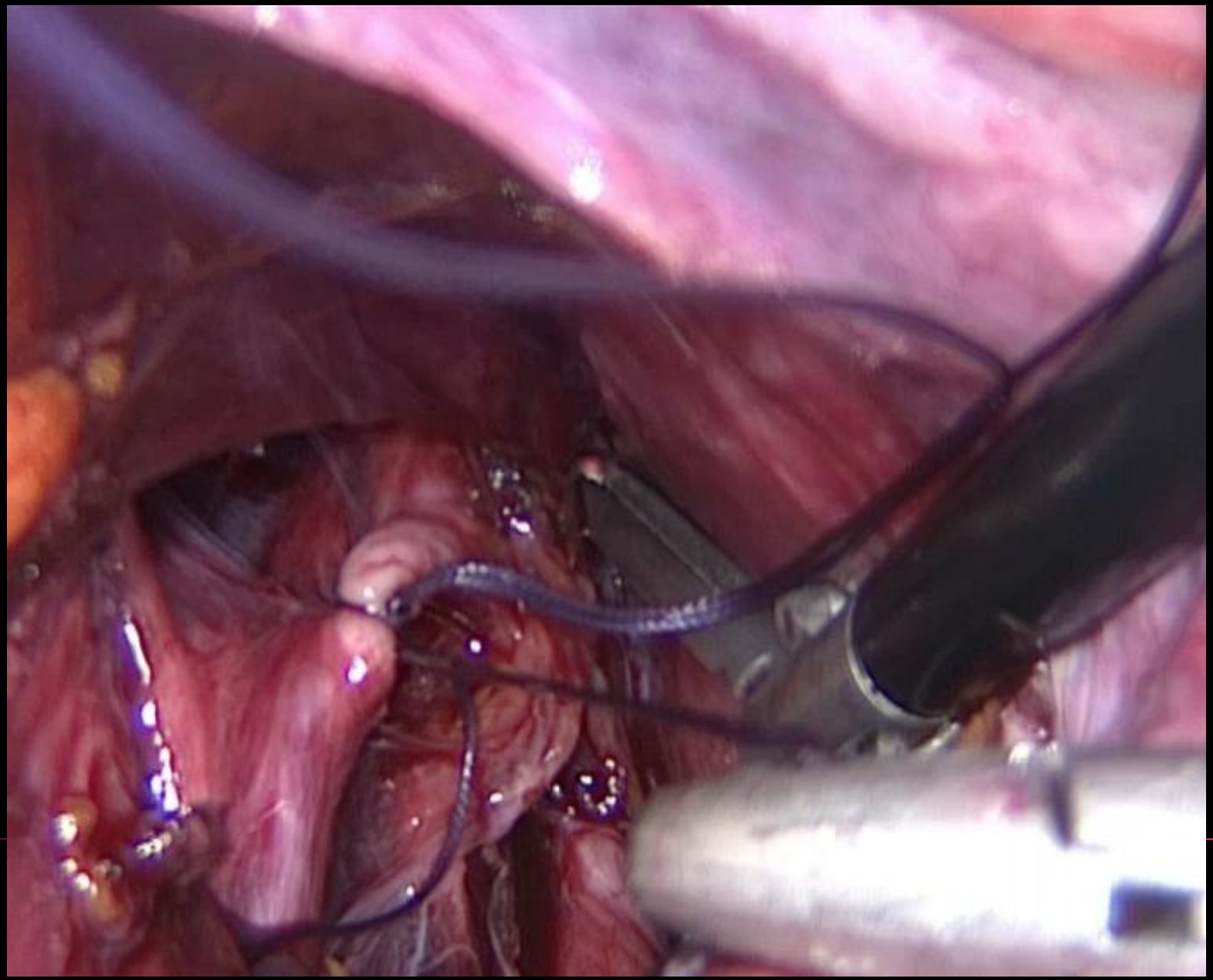


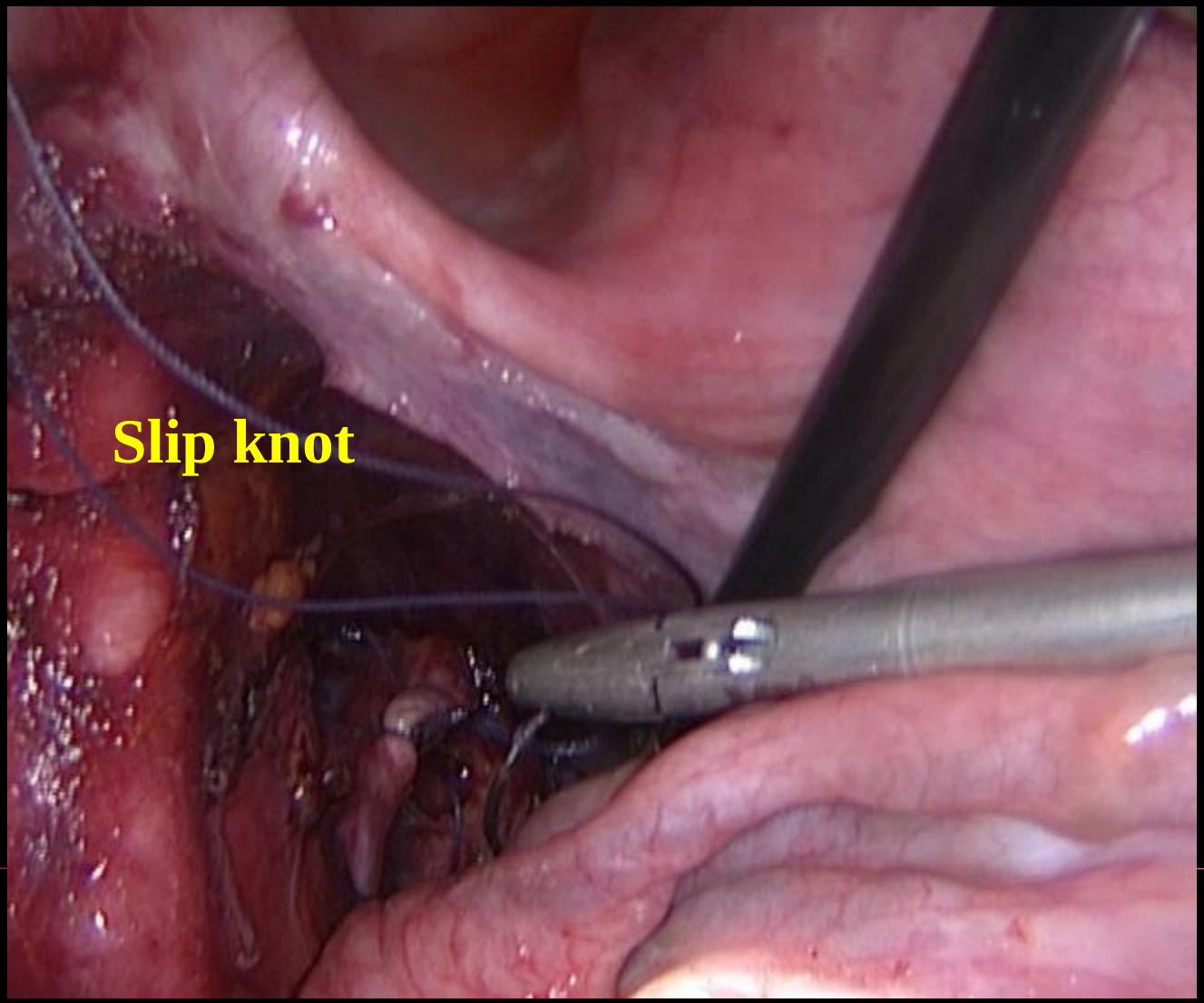


ligation of uterine artery by a slip knot

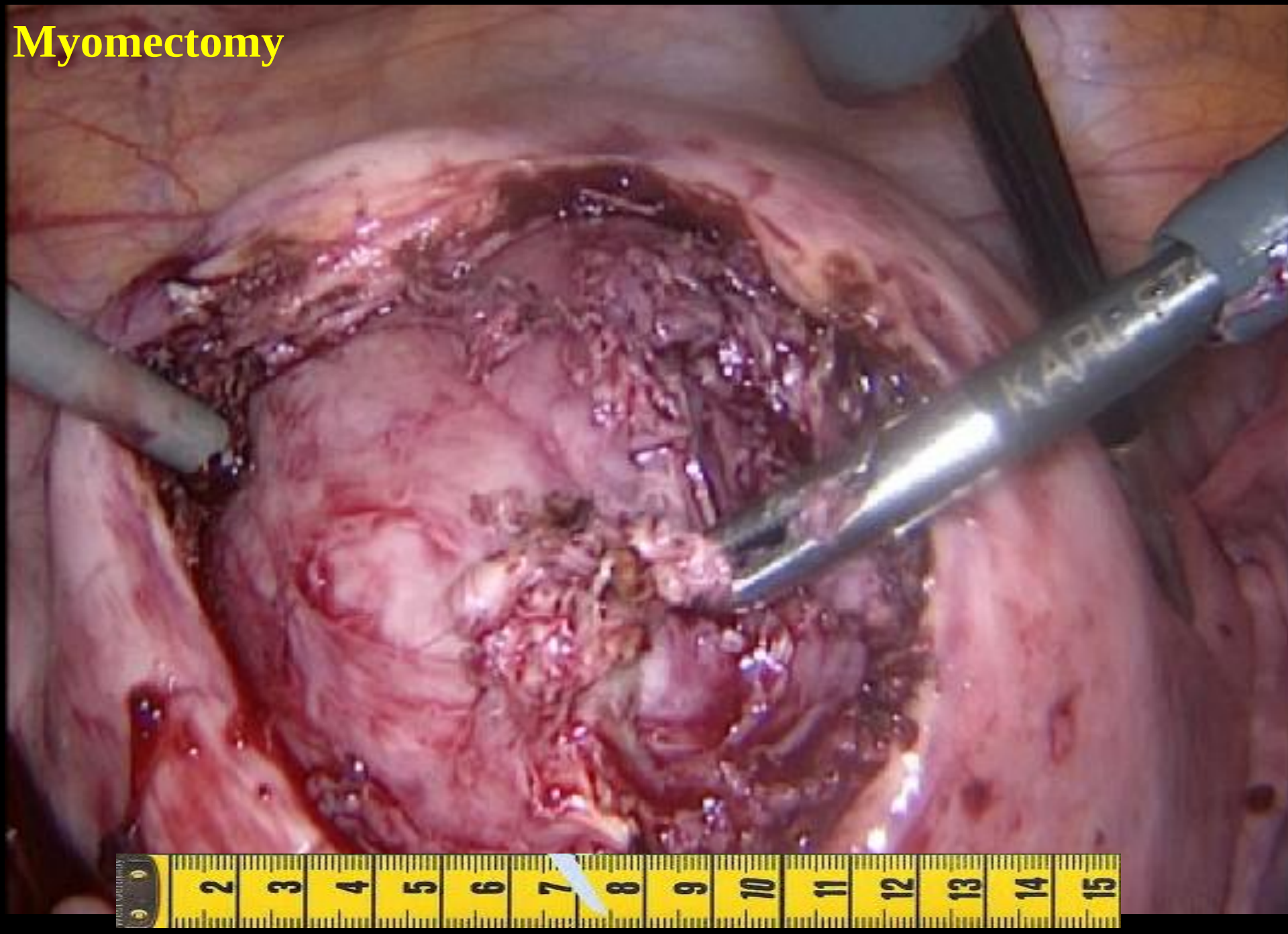




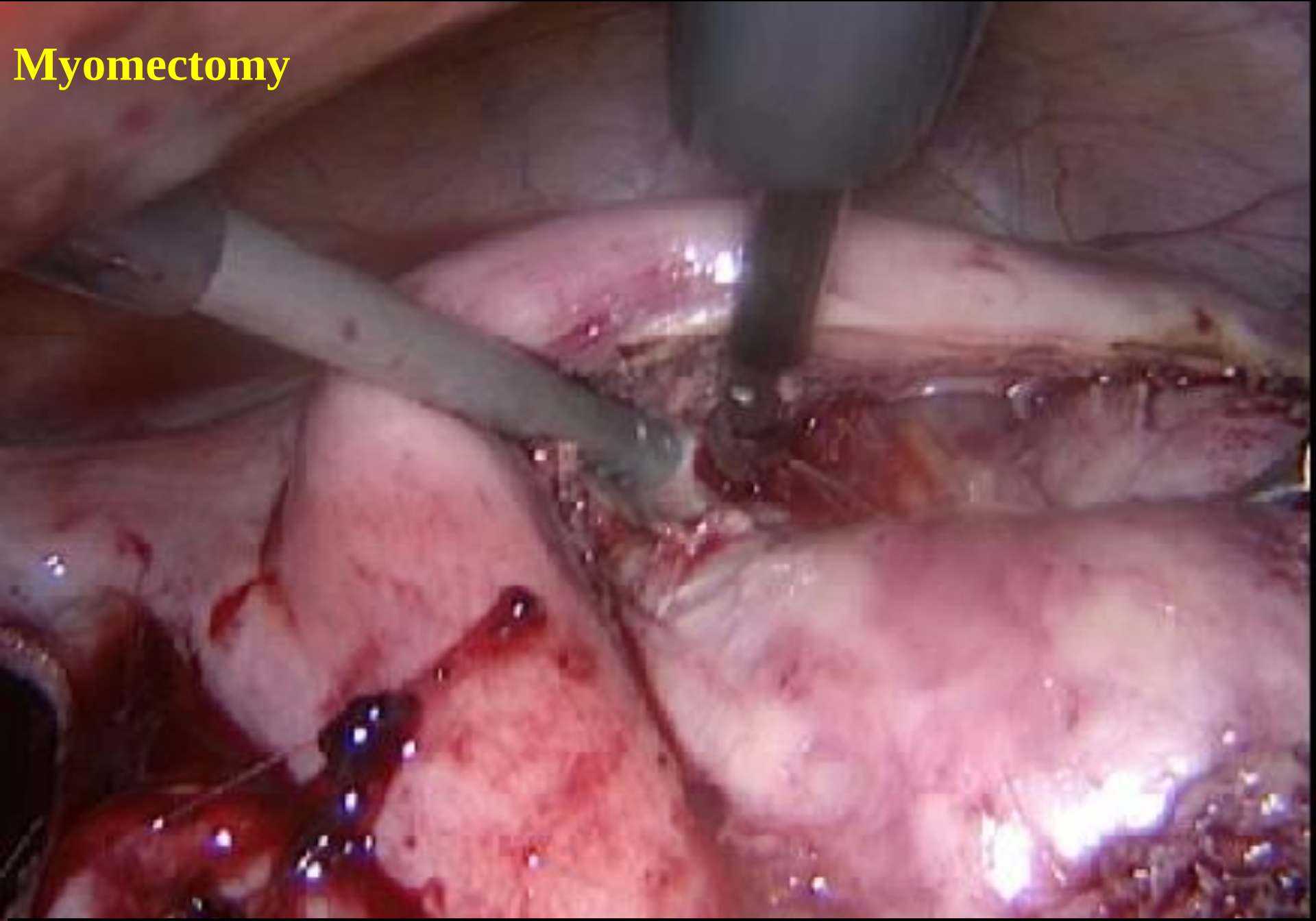



Slip knot

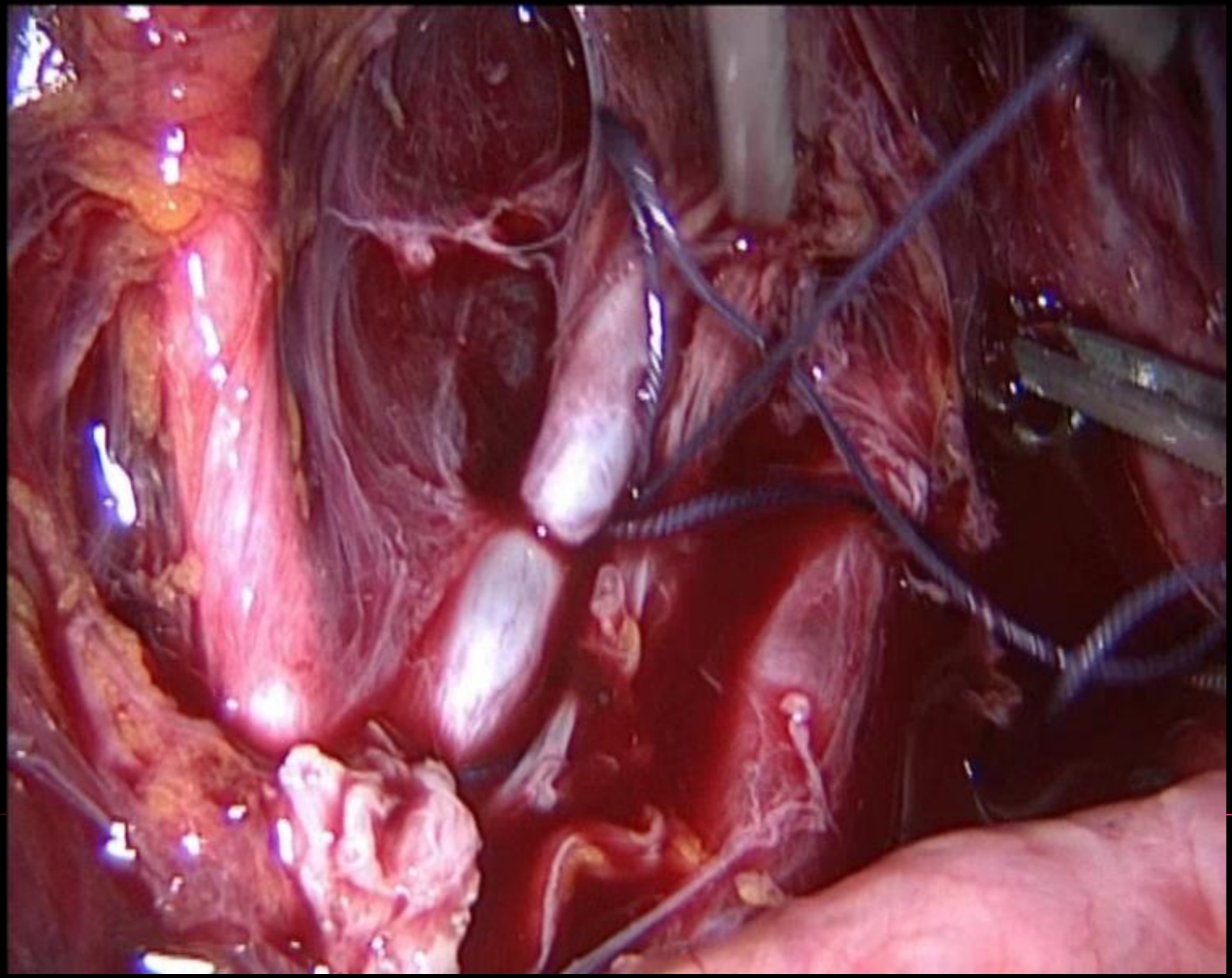
Myomectomy

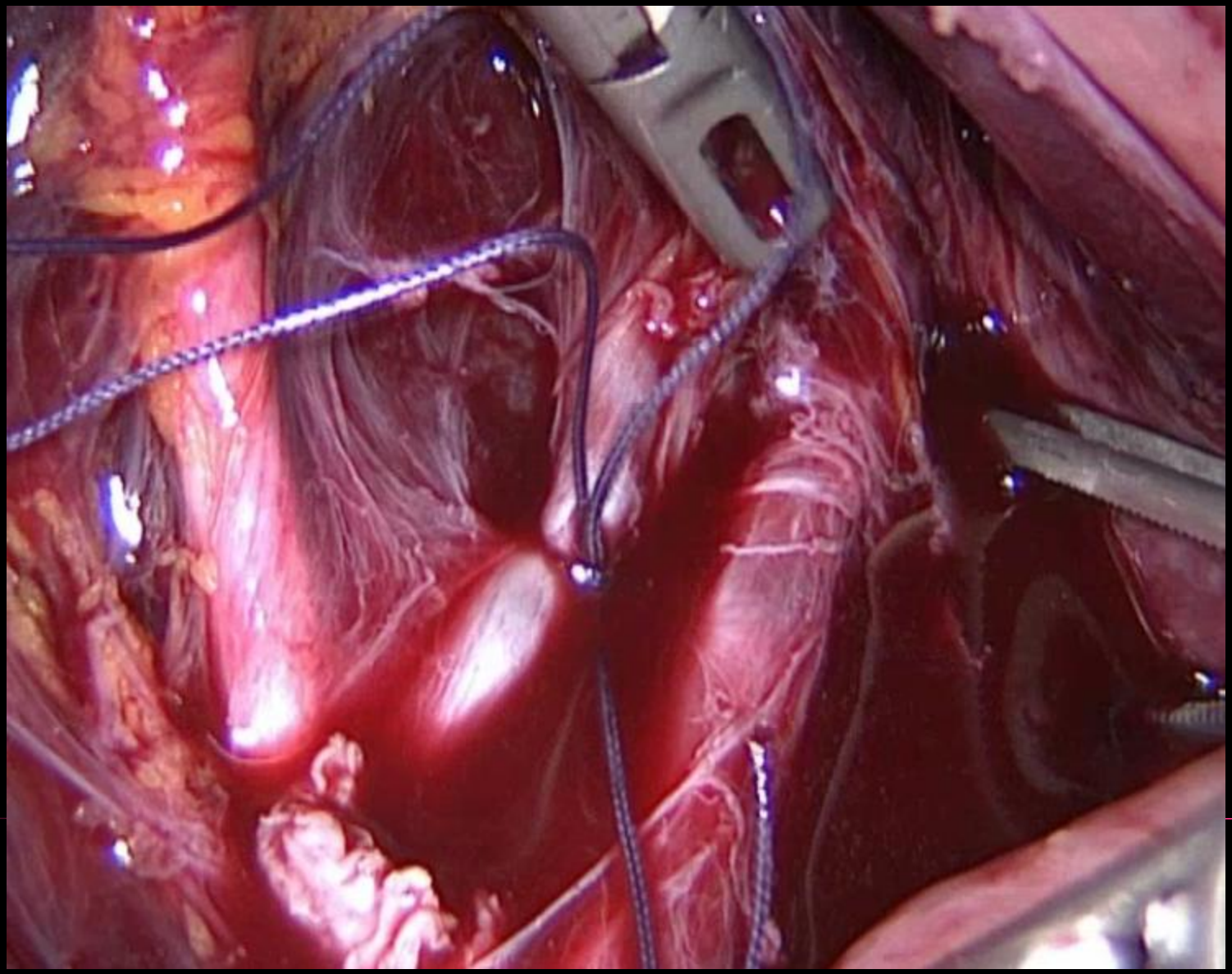


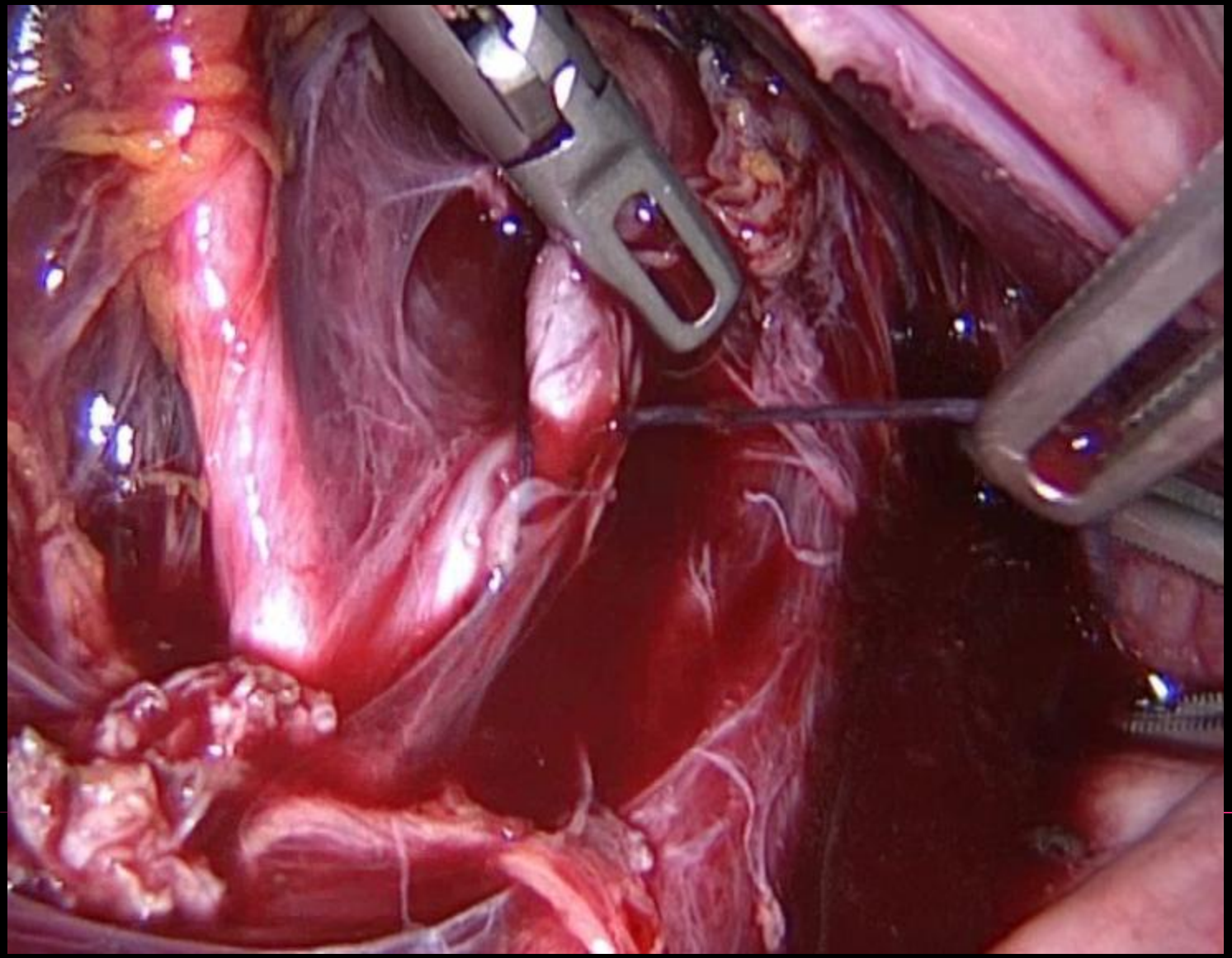
Myomectomy

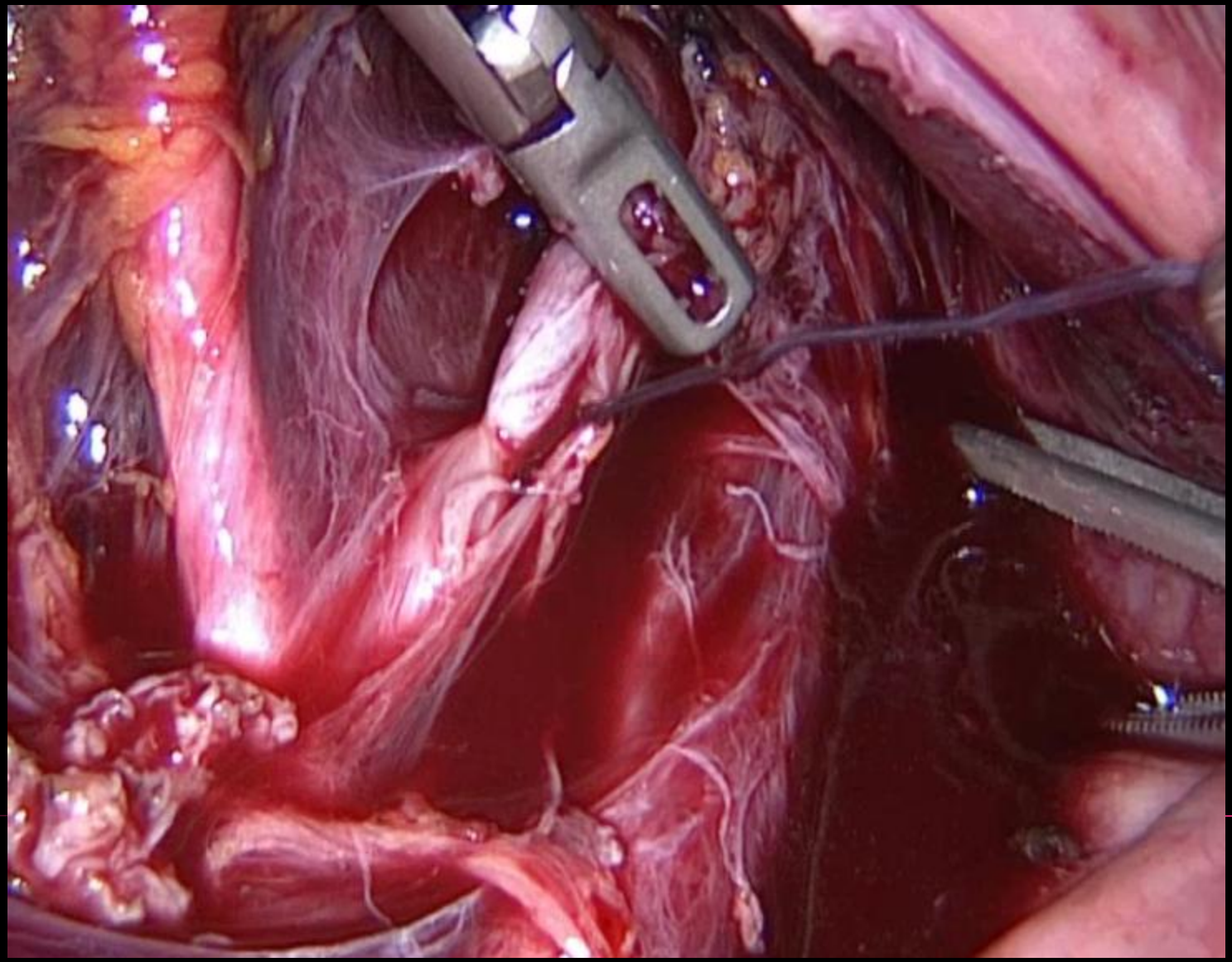


Removal of the knot after closure of the uterus incision

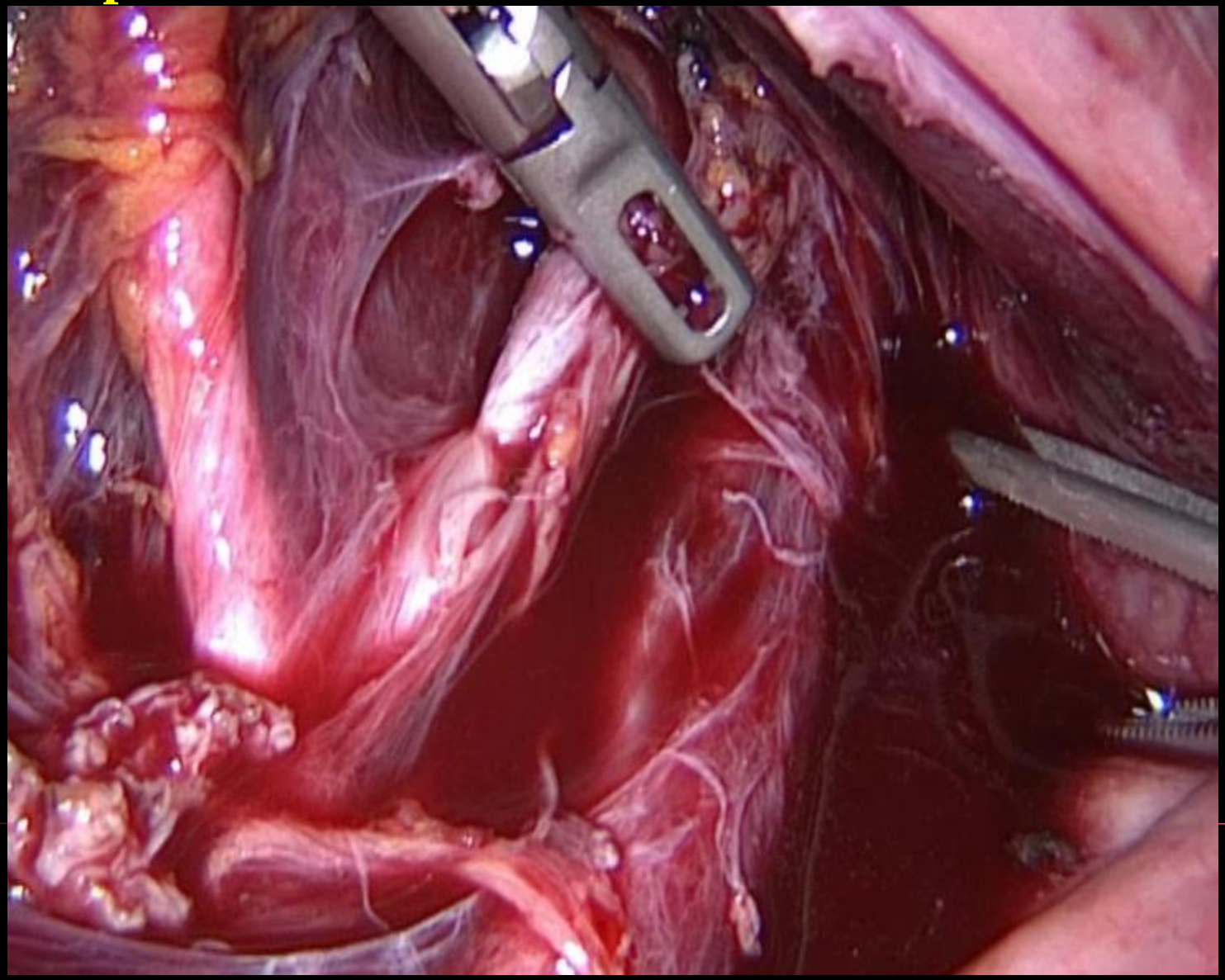








Re-perfusion of the uterus



Conclusions:

The slip tecnique can be performed with standard laparoscopic instruments and material.

It is feasible for transient occlusion of uterine arteries before myomectomy.

TOUA seems to facilitate the laparoscopy and to reduce the rate of conversion to laparotomy in patients with large myomas.

THANK YOU!