Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)
in pelvic organs prolapse, a new standard?

DEFINITION of POP

"the descent of one or more of the anterior vaginal wall, posterior vaginal wall, the uterus (cervix) or the apex of the vagina"

Haylen BT, Maher CF, Barber MD, et al. An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for female pelvic organ prolapse (POP). *Int Urogynecol J* 2016; 27(4): 655–684.

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Why does the patient get a POP condition?

"Pelvic organ support depends on interactions between the levator ani muscle and pelvic connective tissues"

"Failure of the connective tissue attachments between the uterus and vagina to

John O. L. DeLancey, MD et al.

Curr Opin Obstet Gynecol . 2016 October ; 28(5): 420–429. doi:10.1097/GCO.0000000000000312.

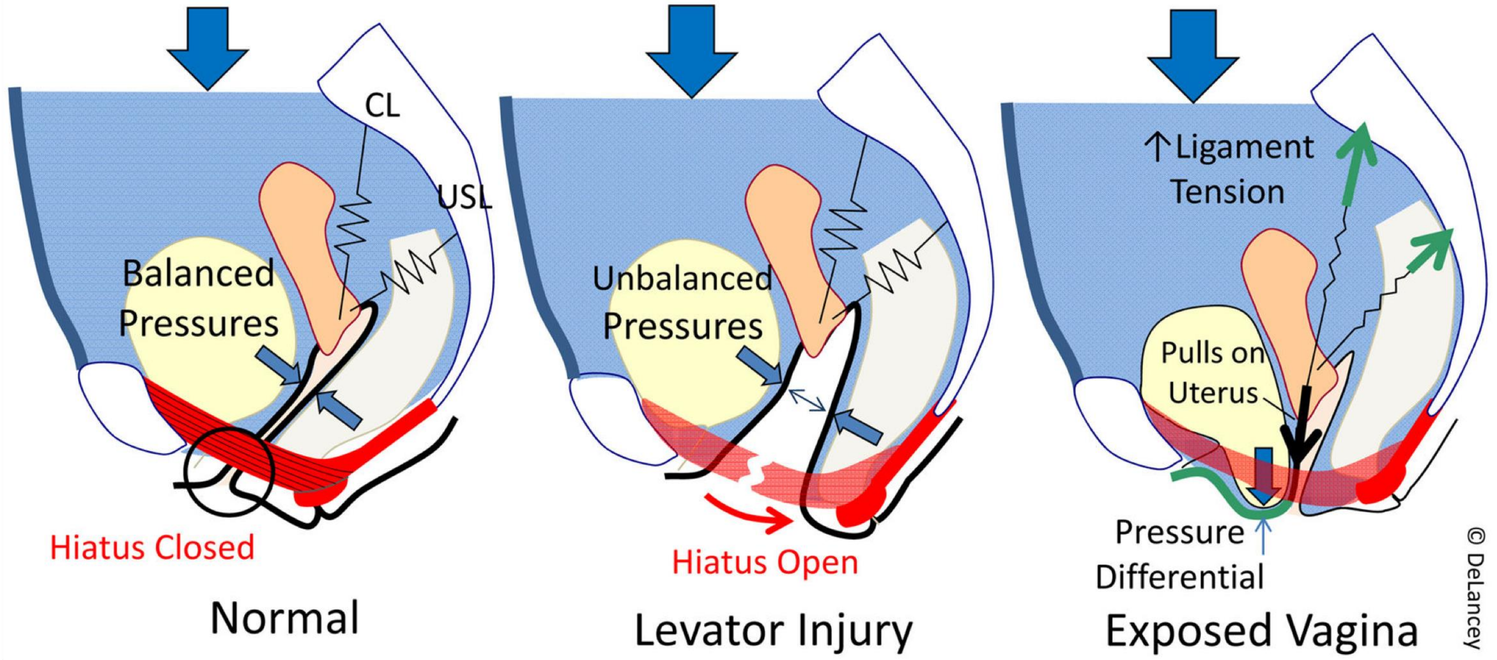
Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Why does the patient get a POP condition?



John O. L. DeLancey, MD et al.

Curr Opin Obstet Gynecol . 2016 October ; 28(5): 420–429. doi:10.1097/GCO.0000000000000312.

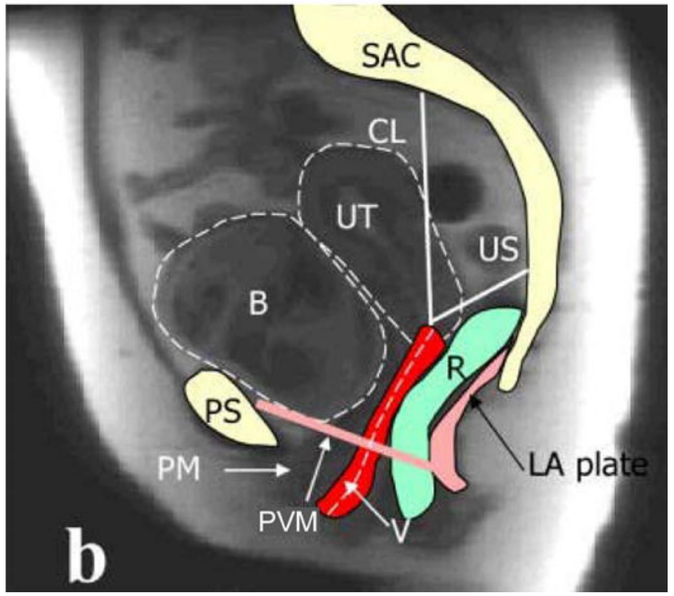
Joaquim Costa Pereira / email: jmcpereira62@gmail.com

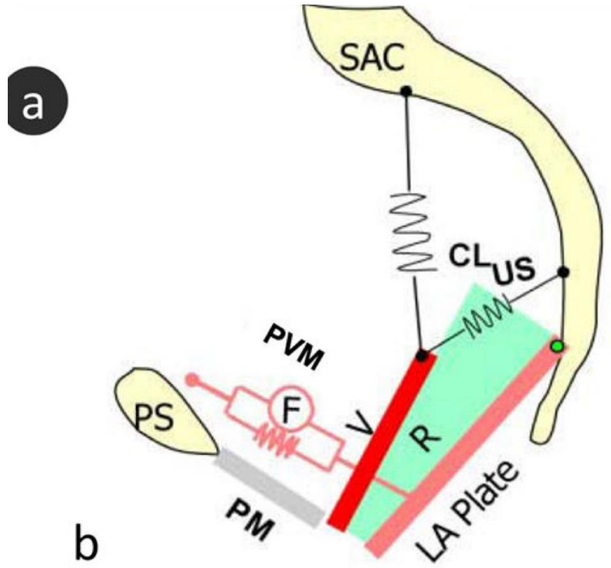
UNIDADE LOCAL DE SAÚDE BRAGA

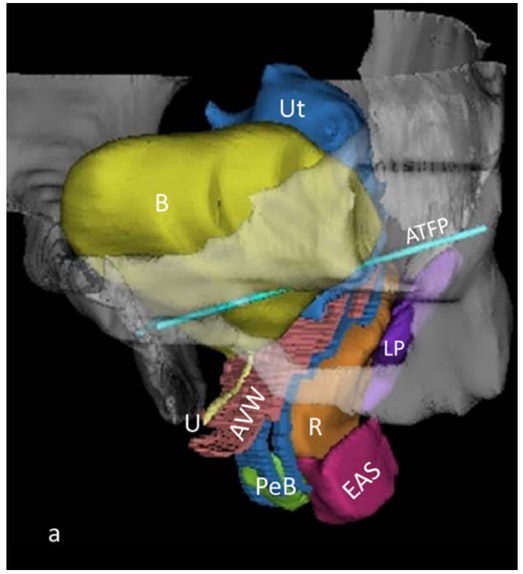
Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Why does the patient get a POP condition?







John O. L. DeLancey, MD et al.

Curr Opin Obstet Gynecol . 2016 October ; 28(5): 420–429. doi:10.1097/GCO.0000000000000312.

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

MRI evidences

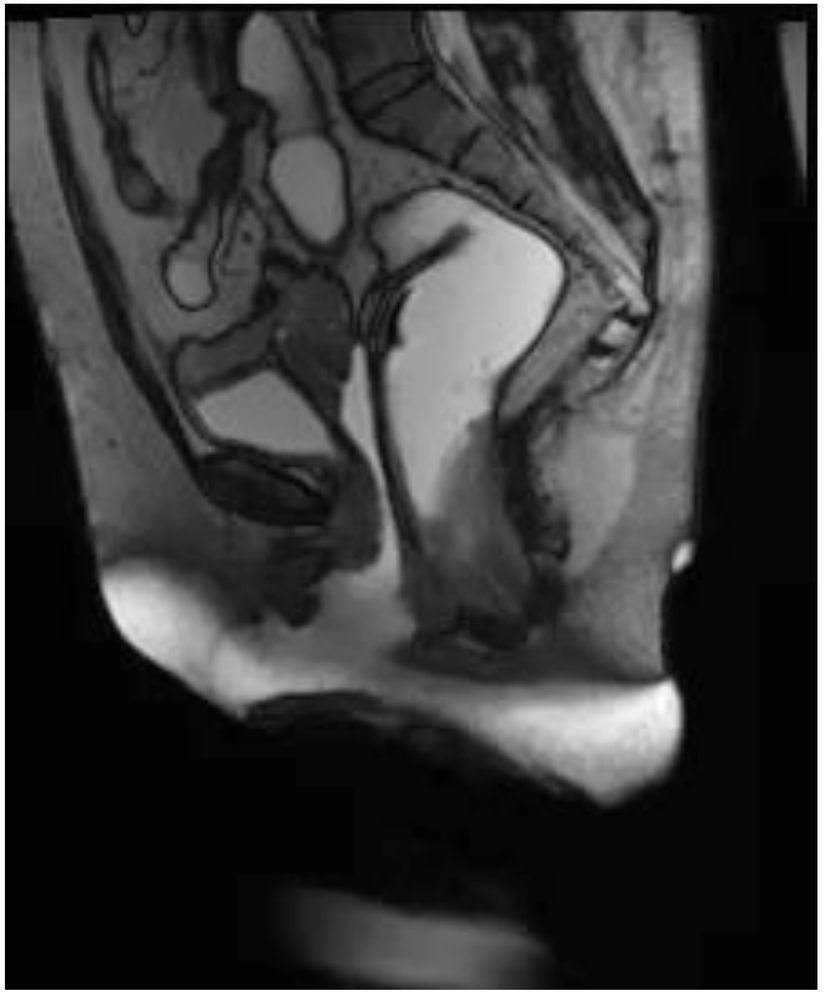
Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

MRI evidences



Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

MRI evidences
41 patients SOD

	N of patients	% of patients
Perineal descent	38/41	92,7
Central Prolapse	30/41	73,2
Tricompartimental Prolapse	27/41	73,2
Rectal Intussusception	33/38*	86,8
Rectocele	38/41	92,7
Cistocele	37/41	90,2
Enterocele	23/41	56,1

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

What is the great evidence of POP condition?

Central compartment prolapse is the key point due to:
Larger hiatus size (you can see it in Line H)
Failure of connective tissue attachments

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

How to treat POP condition?

Central compartment prolapse is the key point so the treatment:
Suspension of central compartment
Rehabilitation of pelvic floor muscles

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

What is a Pelvic Organ Pexy?

Suspension of a pelvic organ to a fixed structure

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

What is the goal of the pexy?

Anatomy & Function

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

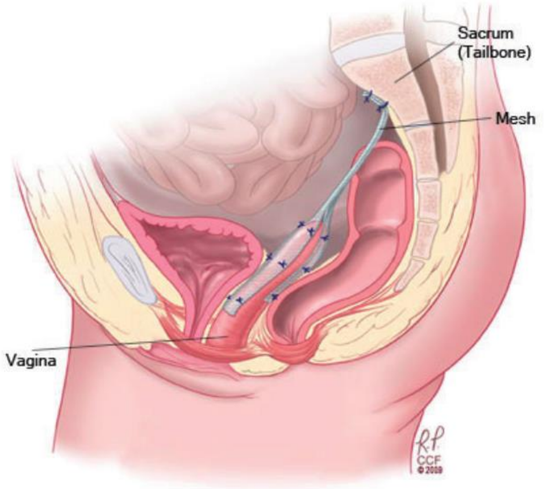
UNIDADE LOCAL DE SAÚDE
BRAGA

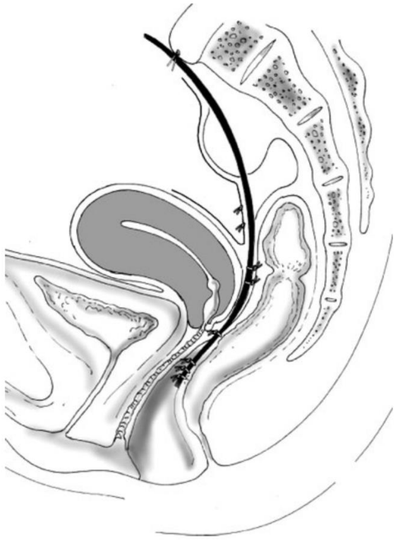
Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

How to do suspension of central compartment?

Sacrocolpopexy (SCP) Rectopexy (RP)



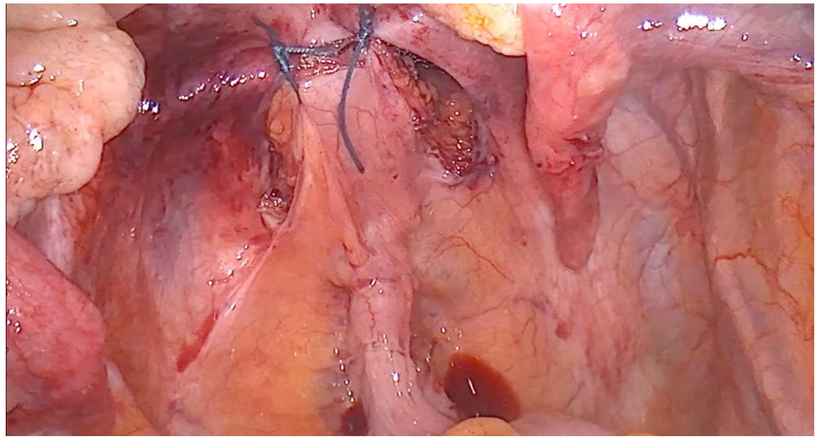


Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

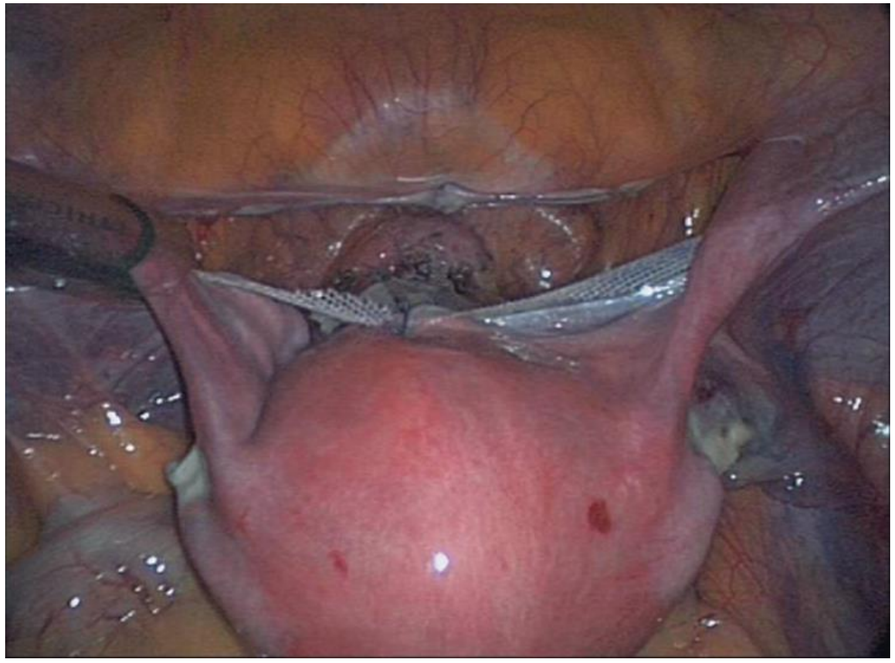
in pelvic organs prolapse, a new standard?

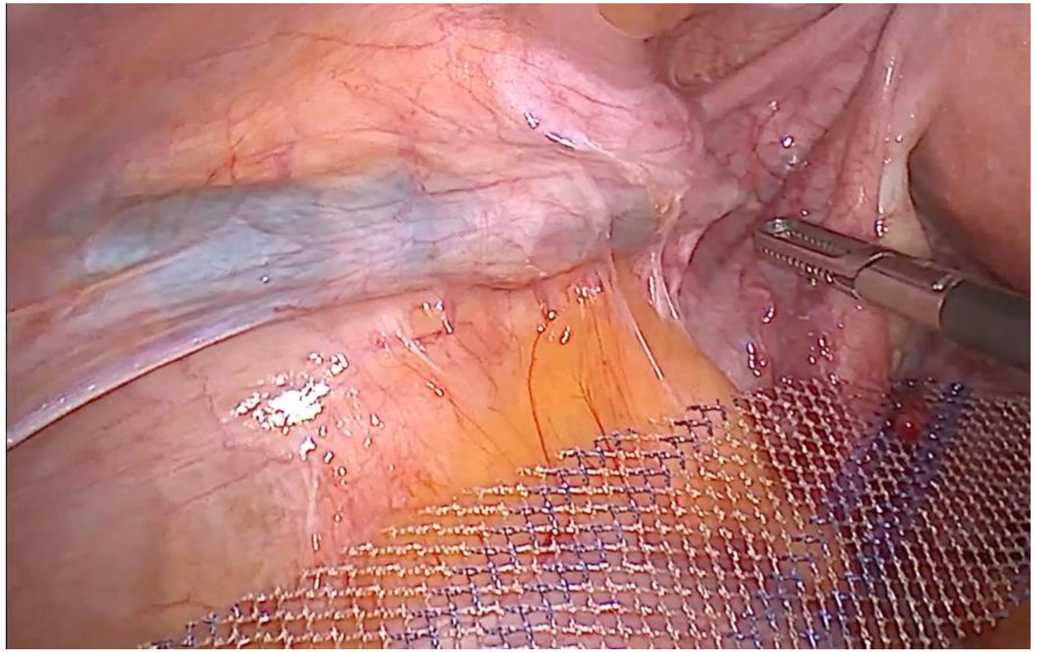


How to do suspension of central compartment?

Alternative to SCP or RP

Lateral Laparoscopic Suspension (LLS)





Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

How to analyze the results of a pexy (LLS vs SCP vs RT?

Learing curve
Restauration of anatomy
Morbidity
Recurrrences
Function

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Laparoscopic management of genital prolapse: lateral suspension with two meshes

Jean-Bernard Dubuisson, Charles Chapron, Arnaud Fauconnier, Katayoun Babaki-Fard and Spiros Dendrinos

Service de Chirurgie Gynécologique (Pr Dubuisson), Clinique Universitaire Baudelocque, C.H.U. Cochin Saint Vincent de Paul, Paris, France

Gynaecological Endoscopy 2000 **9**, 363–368

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Laparoscopic ventral recto(colpo)pexy for rectal prolapse: surgical technique and outcome for 109 patients

A. D'Hoore, F. Penninckx

Surg Endosc (2006) 20: 1919–1923

Long-term outcome of laparoscopic ventral rectopexy for total rectal prolapse

A. D'Hoore, R. Cadoni and F. Penninckx

British Journal of Surgery 2004; **91**: 1500–1505

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)
in pelvic organs prolapse, a new standard?

Minimal Invasive Abdominal Sacral Colpopexy and Abdominal Lateral Suspension: A Prospective, Open-Label, Multicenter, Non-Inferiority Trial

Eleonora Russo [1], Maria Magdalena Montt Guevara [1], Koray Gorkem Sacinti [1,2], Giulia Misasi [1], Maria Falcone [1], Riccardo Morganti [3], Liliana Mereu [4], Francesca Dalprà [5], Saverio Tateo [6] and Tommaso Simoncini [1,*]

J. Clin. Med. **2023**, *12*, 2926. https://doi.org/10.3390/jcm12082926

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)
in pelvic organs prolapse, a new standard?

Apical Recurrence	ALS (n = 200)	ASC (n = 100)	*p*-value
No	184 (92%)	94 (94%)	0.642
Yes	16 (8%)	6 (6%)	
Re-Surgery	5 (2.5%)	2 (2%)	>0.999

Anterior Recurrence	ALS (n = 186)	ASC (n = 72)	*p*-value
no	156 (83.9%)	58 (80.6%)	0.580
yes	30 (16.1%)	14 (19.4%)	
Repeat Surgery	4 (2.1%)	4 (5.5)	0.242
Posterior Recurrence	**ALS (n = 12)**	**ASC (n = 55)**	***p*-value**
no	6 (50%)	47 (85.4%)	0.013
yes	6 (50%)	8 (14.6%)	
Repeat Surgery	1 (8.3%)	0 (0%)	0.429

Characteristic	ALS (n = 200)	ASC (n = 100)	*p*-value
Clavien-Dindo < 30 days			0.476
Grade 1	10 (5.0%)	3 (3.0%)	
Grade 2	2 (1.0%)	3 (3.0%)	
Grade 3a	1 (0.5%)	1 (1.0%)	
Grade 3b	0 (0.0%)	0 (0.0%)	
Grade 4	0 (0.0%)	0 (0.0%)	
Grade 5	0 (0.0%)	0 (0.0%)	
Clavien-Dindo > 30 days			0.472
Grade 1	12 (6.0%)	0 (0.0%)	
Grade 2	0 (0.0%)	2 (2.0%)	
Grade 3a	4 (2.0%)	3 (3.0%)	
Grade 3b	0 (0.0%)	0 (0.0%)	
Grade 4	0 (0.0%)	0 (0.0%)	
Grade 5	0 (0.0%)	0 (0.0%)	

5. Conclusions

Our prospective multicenter study demonstrates that ALS is a safe, highly effective technique and non-inferior to ASC in the treatment of advanced apical prolapse at 12-months follow-up.

J. Clin. Med. **2023**, *12*, 2926. https://doi.org/10.3390/jcm12082926

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

LAPSTAR

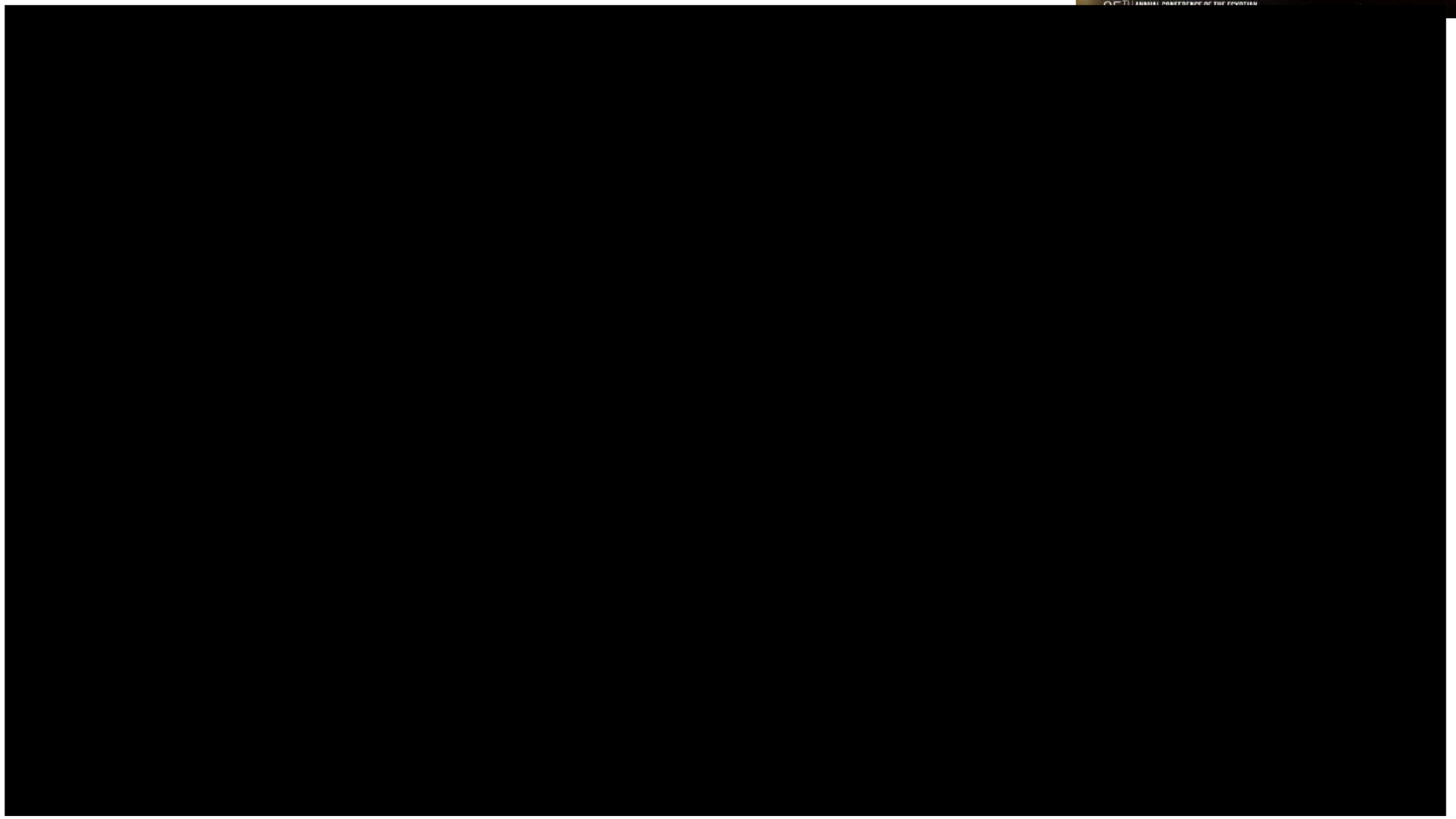
LAPLaroscopic
Simultaneous
Treatment of
Apical prolapse and
Rectocele

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?



Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)
in pelvic organs prolapse, a new standard?

Take Home Messages

Central Compartment
Results
Learning curve

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

PostGraduate course on colorectal surgery

Hospital de Braga

Four weeks course with:
Operating theatres
Inpatients ward / Outpatients ward
Seminars
Wet lab laparoscopy training

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA

Laparoscopic lateral suspension (LLS)

in pelvic organs prolapse, a new standard?

Thank you for your attention

Joaquim Costa Pereira / email: jmcpereira62@gmail.com

UNIDADE LOCAL DE SAÚDE
BRAGA