Original Research Article

Laproscopic myomectomy a case series of 30 patients with pandit's 4s technique

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Abstract

Myomas are benign tumors of smooth muscle of uterus during reproductive years. This study aims at assessing the outcome ie complications, morbidity, and post op recovery in case . Series of 30 patients of laparoscopic myomectomy performed by expert laparoscopic surgeon and his team regardless of size, number ,location of fibroid. In expert hands, with effective training in advanced laproscopy , sound suturing skills laproscopic myomectomy can be done safely, irrespective of size ,number or location of myomas.

Key words: Laparoscopic,patients,surgeon

Introduction

Myomas are benign tumors of smooth muscle of uterus during reproductive years. Myomas are single most cause of hysterectomy before menopause., responsible for 20 -70%of all hysterectomies[1].Myomectomy is preferred over hysterectomy in case patient wants to preserve fertility .

Against open myomectomy laparoscopic approach has its own advantages like fewer infection, less pain, faster recovery and shorter hospital stay. However, laparoscopy can have its own complication, one inherent to surgery depending on the pathology and other due to laparoscopic mode[2].In laparoscopic myomectomy risks is more with increase in number and size of the fibroids and difficult locations like cervical or broad ligament fibroid which can alter the local anatomy. Available data suggests that in expert hands size, number or location of fibroid is not a limiting factor[3].Seracchioli and colleagues published the result of a five-year study in which 131 women with significant fibroid size more than 5 cms underwent myomectomy by both open and laparoscopy mode.

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Laparoscopy group had lower incidence of febrile morbidity T>38 p<0.05,less drop in hemoglobin <0.007,less post op stay P<0.001[4].This study aims at assessing the outcome ie complications, morbidity, and post op recovery in case . Series of 30 patients of laparoscopic myomectomy performed by expert laparoscopic surgeon Dr. Kishor Pandit and his team regardless of size, number ,location of fibroid.

Review of literature

Laproscopy began in early 1900 'initially taken by surgeons followed by gynaecologist.Tubal sterisation was the first followed by ectopic pregnancy.Now a days due to increase in surgical expertise there are many new areas of laproscopic treatment coming up thereby opening up wealth of new instruments to keep up the needs of the surgeon[2].However lack of tactile stimulation and limited space make things more difficult ,Training in depth perception and dexterity is must.Also in myomectomy there is a real risk of heavy intraopbleeding, therefore meticulous and effective suturing is a must. Limitation of space increases risk of injury to vital structures or pelvic side walls so precise knowledge of local anatomy is required[5]. One of the real risk is due to suboptimal suturing causing intraoperative or postoperative bleeding inadequate healing of scar resulting in uterine rupture in

pregnancy[6].Recent advances in equipment and training has made Laproscopic myomectomy well tolerated even in large myomas reducing bleeding and operative time .Advanced laproscopy training is most important before attempting lap myomectomy especially suturing skills and morcellation technique. Fibroids are the most common benign tumors in females.Majority of them are asymptomatic and require no further intervention. Symptomatic ones causing menstrual irregularities,iron deficiency anaemia, pressure symptoms pain etc need management .There are different modalities to suit the patients choice for either conservative or surgical approach. GnRH analogues, antifibrinolytics ,OcPills , LNG IUS , SERM ,SPRMS,uterine artery embolization ,MRI guided sonomyolysis ,cryomyolysis and so on ,for conservative side ,but most of them are time consuming &,results vary from case to case Surgical treatment is mainstay for long term symptom free relief[8]. In women who wish to preserve their fertility Laproscpic myomectomy is most rewarding. Laproscopic myomectomy is comparable to open myomectomy in case of fertility outcome[9]. Submucosal fibrids are dealt with hysteroscopically ,intramural and subserosal fibroids are dealt laproscopicaly[10].

Design: prospective observationalstudy

Setting tertiary endoscopy centre

Inclusion criterion ;total 30 cases healthy non pregnant patients with symptomatic myomas averaging more than 8 cm, no exclusion based on number or location of myoma

Exclusion criterion patient with raised CA125 ,abnormal PAP and those on GnRH Analoguesin last three months

Variables evaluated age BMI ,Comorbid disease any past surgeries ,intraoperative complications, post op complicatins ,operative time blood loss,hospital stay .

Evaluation;patient were thoroughly evaluated with preoperative workup,anaesthesia fitness, Pap smear ,endometrial sampling and USG to rule out malignancy. Preop bowel preparation done by starting the patint on liquid diet 2 days prior and shifting to COLOPREP one day prior

Procedure : under GA patient in supine position parts painted and draped bladder catheterized. Supraumbilical port entry by open HASSANS technique .No uterine manipulation as patient in supine position, manipulation done by myoma screw fixed to myoma .To decrease intraop bleeding solution of vasopressin in dilution (10 units in 200 ml NS)injected sub serosally at the base fibroid or insertion of both round ligaments in case of multiplre fibroids. Incision made by harmonic scalpel elliptically on the protruding part of fibroid unless pedunculated.In case of posterior wall multiple fibroids vertical incision on posterior wall preferred. Serosa and myometrium incised till pseudocapsule ,enucleation of myoma done by myoma screw ,defect repaired by suturing with barbed suture in two layers.suction irrigation done , fibroid removed by morcellation.Urethral catheter removed on day one ,clear liquids started 6 hours after surgery ,normal diet started on first post operative day with return of good bowel functions.

Results

Larger fibrrid required more operative time due limited operative field and restriction in range of instrument mobility,also more time spent on morcellation.However supine position helped to allay a lot of this difficulties ,at the same time helping in reducing the risk to vital organs .In SUPINE position the inter ureteric distance increases at all levels as compared to lithotomy.One patient was converted to open laparotomy due to cystic degeneration of fibroid. One patient was converted to subtotal hysterectomy as fibroid was huge arising out of broad ligament and occupying the lower abdomen [Table 1-5].

Table 1:History of patients

Name	Age	Ht/Wt	BMI	Comorbidity	Myoma size	Op time	Bld loss	Hosp.stay	Prev-abd sur	Prev LSCS
Tulja Deshmukh	35	5'3"" 68	26	Dm	10wk	1 hour 50 min	300ml	3 days	-	-
Swati Jankar	38	5'2" 65	26	-	Multiple fibroids Largest 6cms	2 hours	250 ml	2 days	-	-
Sulakshana Jadhav	35	5'5" 70	25	-	Large intramural fibroid 6by8 cms and 5by 5cms	2hrs 10 min	250ml	2 days	-	-
Prajakta Pandit	34	5,2" 61	24	Large adnexal mass	5cms by 6 cms intra mural fibroid	1hr 30 min	150ml	2 days	-	-
Nalinraut	28	5'3" 70	28	-	Multiple fibroids	2 hours	250ml	3 days		I LSCS
Godavari Kamble	34	5'5" 65	26	-	Posterior wall fibroid 10 cms	2hrs	200ml	2days	-	-
Mahananda Kumbhar	30	5'2" 64	26	-	Multiple fibrois , dense adhesions	2hr 30 min	250ml	3 days	-	Prev laproscopy
Vimal Pardhi	27	5'3" 63	24	-	Posterior wall fibroid 5 by 6 cms	2hour	200ml	2 days	-	-
Bhagyashree Pawar	32	5'4 23	23		Fibroid 8 cms	1 hour 50 min	150 ml	2 days	-	-
Surabhi Joshi	31	5'2 73	28	-	Fibroid 8 by 10 cms fundal Post wall small 4 by 4	2 hours 20	250ml	3 days	-	-
Madhuridhumbre	36	5'4 70	26	-	Multiple fibroids largest 8 by 8 cms	2hrs 30 min	350ml	3 days	-	-
Priyanka Khare	32	5'1 61	24		Iarge sub serosal fundal 8 by 6 cms	1 hr 50 min	200ml	2 days	-	-
Rinkujain	36	5'3 65	25	-	Multiple fibroids	2hours 20 min	300ml	3 days	-	-
Madhurigosavi	35	5'2 70	28		Large myoma 12 by 8cms	2hrs 30 min	350ml	3 days	-	-
Sheela Mengale	30	5'2' 61	24		Fundal and anterior wall fibroid	2 hrs	300ml	3 days	-	-
Vrushalijagtap	34	5'3 72			Large fundal fibrod	2hrs 20 min	350ml	3 days	-	-
Vrushaliahire	35	5,2 65	24		Large fibrid 15 by 12 cms from rt lateral wall occupying the broad ligament	3 hrs	500ml	3 days	-	-
Anushree--Dubey	34	5'3 73	28		Multiple fibroids largest 6 cms	2hrs 40 min	300ml	3 days	-	-
Anuradhadhege	31	5'2' 65	26		Large ant wall fibroid 8 by 6	2hrs	250 ml	2 days	-	-

					cms					
Archana Yadav	35	5'2 68	28		Cystic degeneration of large fundal fibroid	2hrs 2o min Open larotomy	200ml	3 days	-	-
Sakhubaikalbhor	28	5'1 61	24		12 to 15 cmsfundal fibroid	2 hrs	200ml	3 days	-	-
Sunita Mule	31	5'3 64	22		10 cms fundal fibroid ,post wall fibroid 4 by 4	2hrs 20 min	2ooml	2 days	-	-
Ashwini Shinde	34	5'3 64	24		Multiple fibroids largest 6 by 6	2hrs 40 min	500ml	3 days	-	-
Latadhumal	32	5'5 70	26		Large cervical fibroid 6 by 6 cms	2hrs 30 min	400ml	3 days	-	-
Vishrantipatkar	36	4'970	30		Large fundal and ant wall fibroid	2hrs 2o min	250ml	2 days	-	-
Madhurichoudhary	37	5'4 61	23		Large fibroid 8 cms	1 hr 50 min	250ml	2 days	-	LSCS
Uma Lohare	35	5'1 75	31		Cervical fibroid 5 by 4 cms	2hrs 10 min	300ml	3 days	-	-
Shraddha Shirodkar	37	5'6 74	29	-	Large fundal fibroid 8by 8; Ant wall 6 by 8 Right lat wall 6 by 6cms	2hrs 50 min	500ml	3 days	-	-
Madhuri Gambhir	30	5'3 59	23		8cms fundal fibroid 5 cms left lateral wall	2hrs 30 min	350ml	3 days	-	-
Heenatambe	35	5'2 62	24		Multiple fibroids incuding left broad ligament large fibro	Subtotal hysterectomy	500ml	3 days	-	-

Table 2:Descriptive Statistics of Age with previous history of LSCS

		AGE		
	-	**ILSCS**	**Prev Laproscopy**	**LSCS**
Valid	27	1	1	1
Missing	0	0	0	0
Mean	33.407	28.000	30.000	37.000
Std. Deviation	2.707	Nan	Nan	Nan
Minimum	27.000	28.000	30.000	37.000
Maximum	38.000	28.000	30.000	37.000

Table 3: Descriptive Statistics

	Bld Loss	OP Time	Age	Ht	BMI	Comorbidity	Myoma Size	Hosp.Stay	Prev-Abd Sur	Prev LSCS	Weight
Valid	30	30	30	30	29	12	30	30	29	30	30
Missing	0	0	0	0	1	18	0	0	1	0	0
Mean			33.233		25.690				25.690		65.067
Std. Deviation			2.897		2.269				2.269		9/139
Minimum			27.000		22.000				22.000		23.000
Maximum			38.000		31.000				31.000		75.000

Note. Not all values are available for *Nominal Text* variables

Table 4:Descriptive statistics(Days)

	Blood loss		Myoma size		OP Time	
	2 Days	3 Days	2 Days	3 Days	2 Days	3 Days
Valid	11	19	11	19	11	19
Missing	0	0	0	0	0	0

Note. Not all values are available for *Nominal Text* variables

Table 5:Descriptive statistics(Age,BMI,Prev LSCS)

	BMI	AGE	PREV LSCS
Valid	29	30	30
Missing	1	0	0
Mean	25.690	33.233	
Std. Deviation	2.269	2.897	
Minimum	22.000	27.000	
Maximum	31.000	38.000	

Note. Not all values are available for *Nominal Text* variables

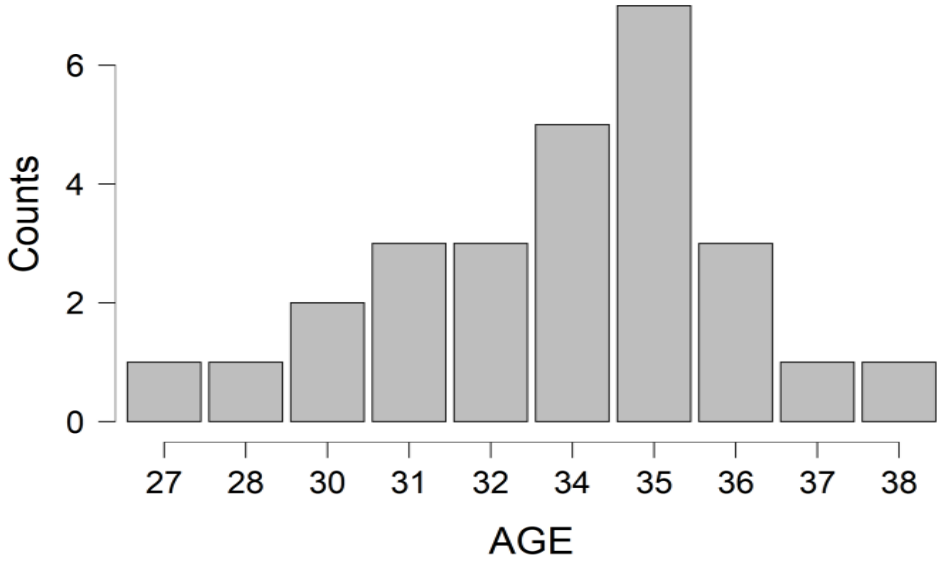

Fig 1:Age versus counts

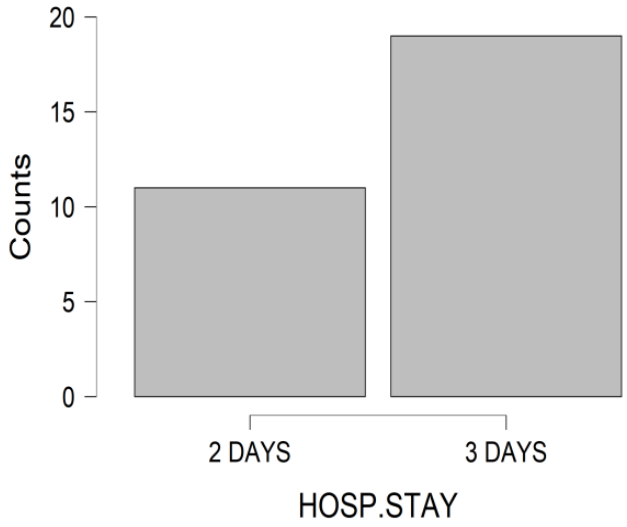

Fig 2:Hospital stay versus counts

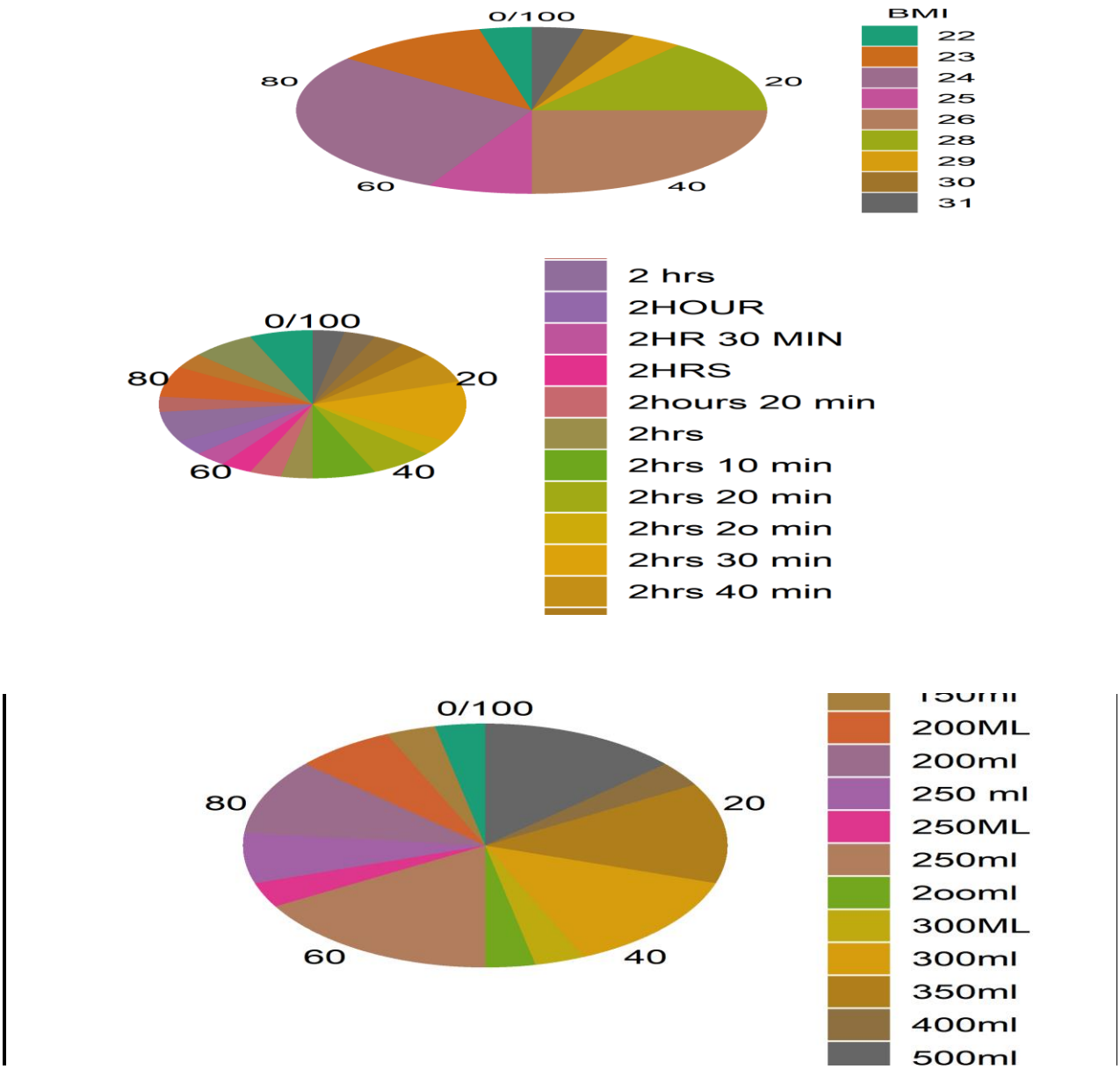

Fig 3: Descriptive Statistics

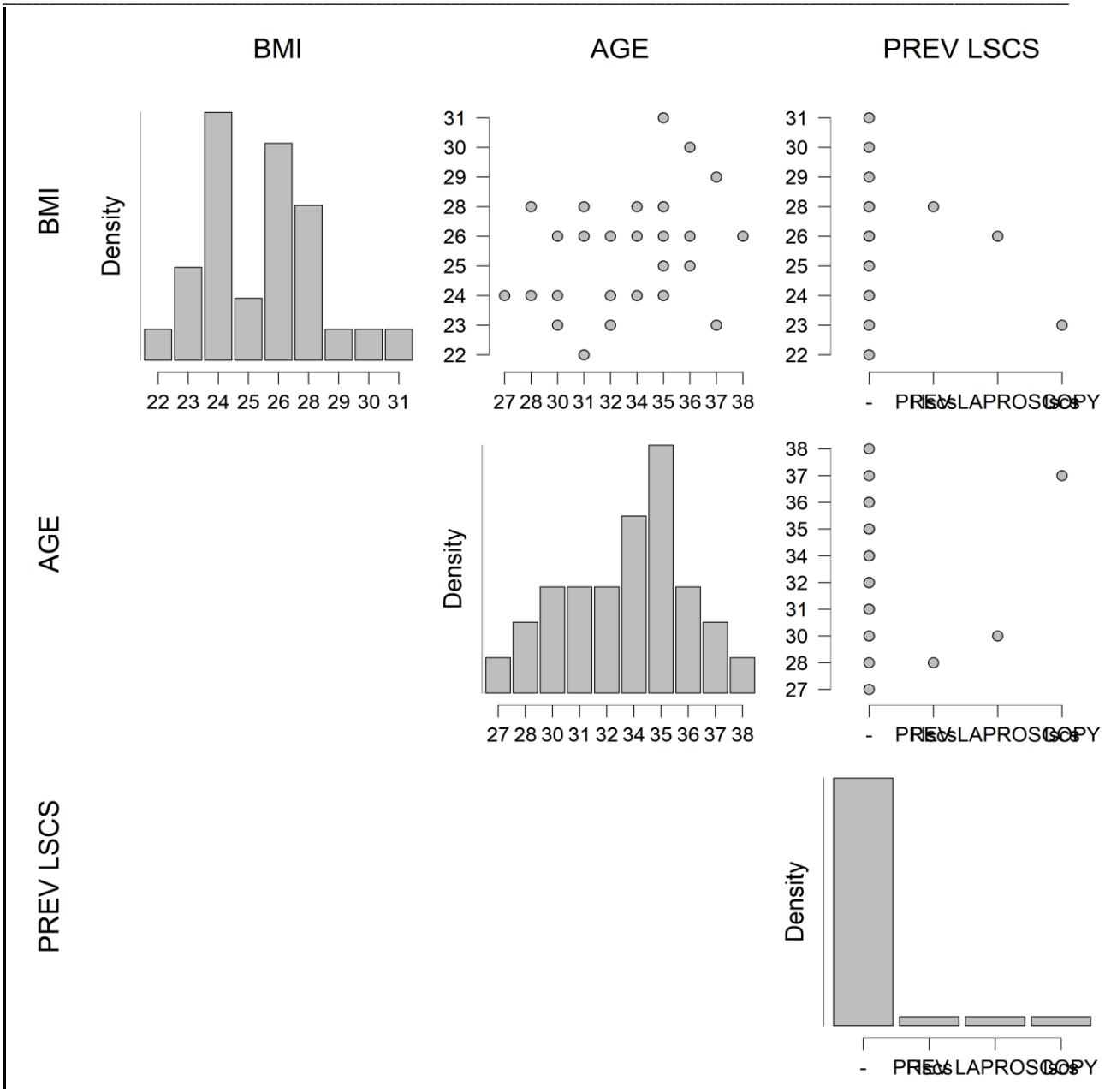

Fig 4:Graphical representations

Conclusion

In expert hands, with effective training in advanced laproscopy,sound suturing skills laproscopic myomectomy can be done safely, irrespective of size ,number or location of myomas .

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