MP 41-12

SIGMOID EPIPLOICA SAVES THE DAY: A STEP FORWARD IN ROBOT ASSISTED LAPAROSCOPIC GENITOURINARY FISTULA REPAIR WITH ITS USE AS TISSUE INTERPOSITION GRAFT

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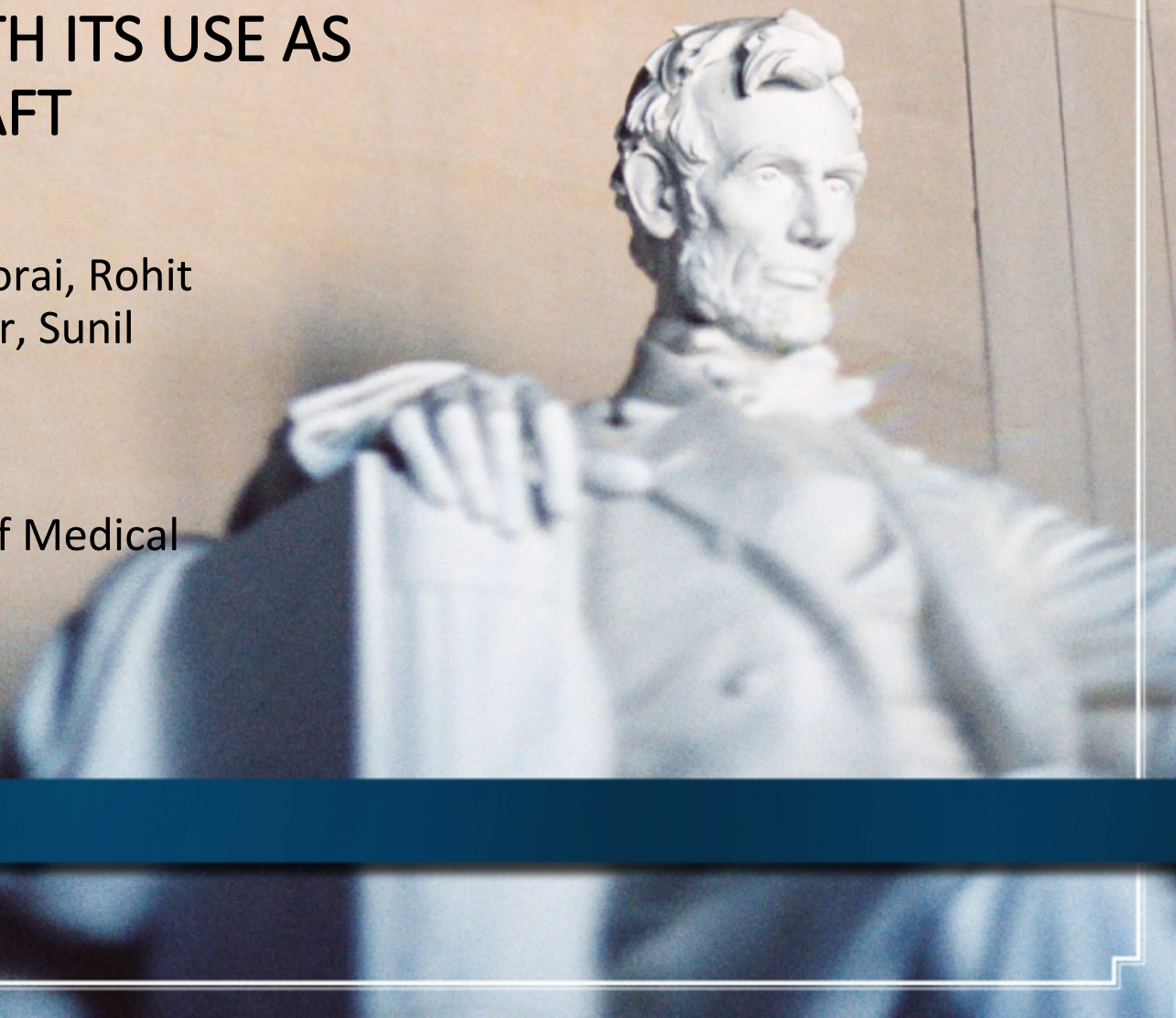

Introduction:

- Genitourinary fistulas demand a precise surgical reconstruction for successfully treatment of this pathological morbidity and cause of social embarrassment.[1]
- Minimally invasive robot assisted techniques have successfully established their niche in the management of such fistulas.
- Nevertheless, these fistulas are known for their recurrence and surgeons have adopted various nuances to improve the outcomes of this surgery.
- Use of well vascularized interposition tissue such as the omentum, is well known to reduce the recurrence rates, but its restricted length and mobility poses an unforeseen challenge at times.[2]
- We explored the use of sigmoid epiploica as the interposition tissue, and present here our experience and results.

Methods:

- Retrospective review of prospectively maintained data of all robot-assisted laparoscopic genitourinary fistula repair surgeries performed between March 2018 and October 2019 was done.
- Preoperative parameters, intraoperative findings, perioperative course and complications, if any, and follow-up data were analysed.
- Preoperative assessment included a detailed history, physical and gynaecological examination, a detailed cystovaginoscopy and a cross sectional imaging.
- All surgeries were performed by a single surgeon on the daVinciXi platform.
- Sigmoid epiploica was used in all cases as an interposition tissue to buttress and also to segregate the suture lines.
- Patients were followed up at 3 weeks,6 weeks and 6 months post surgery to assess for any recurrences.

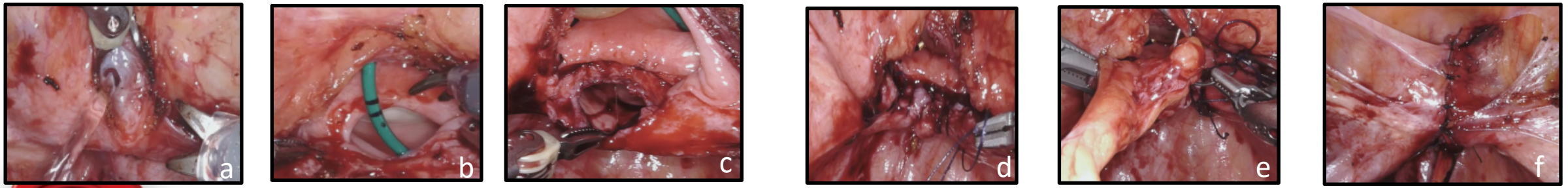

Figure 1: Technique a) Cystotomy b) Fistula excision c) separation of bladder and vagina d) closure of vault e) graft interposition f) bladder closure

RESULTS	
Mean age (years)	38
Fistula size (cm), mean ± SD	1.1 ± 0.66
Mean duration between diagnosis and repair (months)	9.1 (range3-24)
Mean operative time (minutes)	178.23
Mean blood loss (ml)	53.52 (range 40-70)
Mean hospital stay (days)	4.8
Post –operative complications (Clavien- Dindo)	0/19
Return of bowel activity (h)	32 (24–45)
Post-operative SUI (n), Significant bladder spasms (n), Post-operative ileus(n)	5,10,1
Need for suprapubic catheter, n (%)	0
Success, n (%)	18/19 (94.7%)

Discussion

- Robot-assisted laparoscopic VVF repair was first reported from the University of California, by Irvine in 2005.[3]
- Tissue interposition during primary VVF repair decrease recurrence risk. Sigmoid epiploicae appendage(s) provide an excellent buttress although outcome data are limited on VVF repair with sigmoid epiploica tissue interposition.[4]
- These physiologic, pedunculated fatty structures range from 0.5 to 5 cm in length and contain 2 arterioles and one venule, providing vascular and local lymphatic support.[4]
- Disadvantages include torsion of the appendage with resultant ischemia or infarction, secondary inflammation. These events are rare.[4]
- In our present study, we report our experience of robot assisted repair of 19 vesicovaginal fistula cases using sigmoid epiploica transposition with a 94.7% success rate based on patient perception of resolution of symptoms, findings from postoperative pelvic examinations, and lack of leakage on postoperative cystograms.

Conclusion

Robot assisted laparoscopic approach is a feasible and effective method of genitourinary fistula repair. Sigmoid epiploica is an easily available, well vascularized tissue, used to buttress the suture lines during the repair, with excellent long term outcomes.

References

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