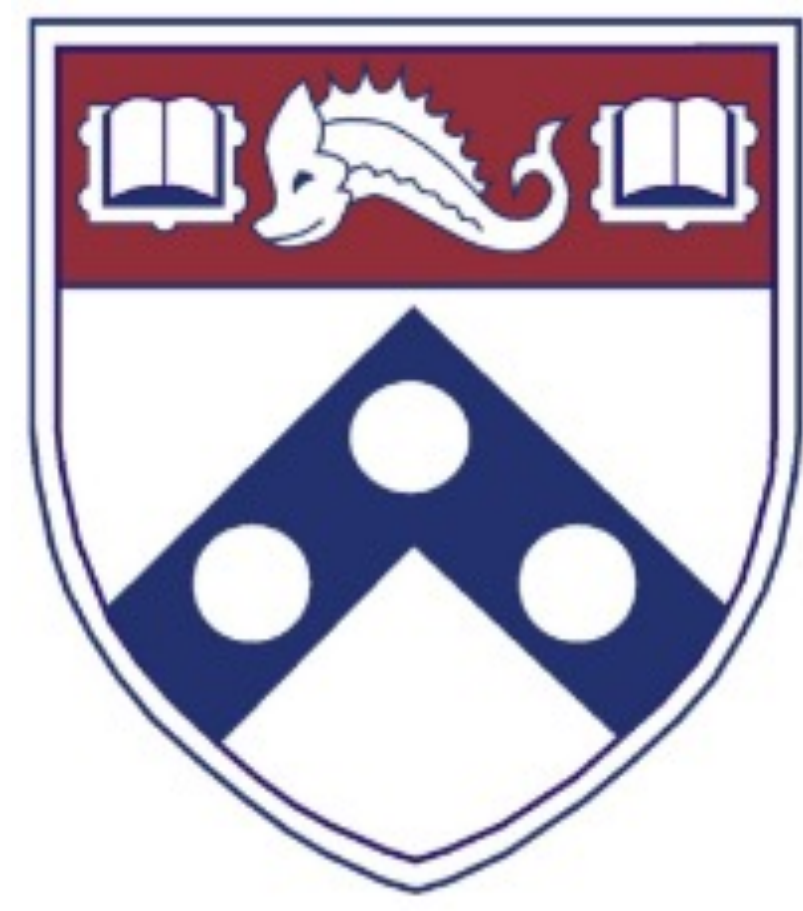
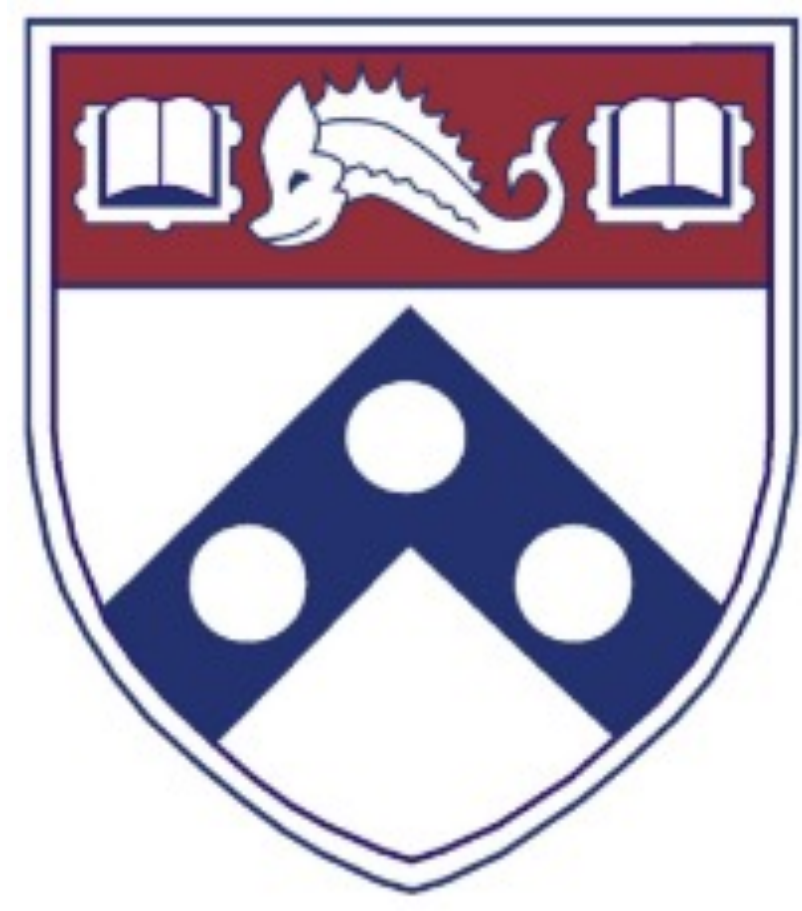




Longitudinal Outcomes of Abdominoperineal Resection Reconstruction: A Single-Center, Retrospective Review

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INTRODUCTION

- Abdominoperineal resection remains a mainstay for low lying colorectal cancer resections.
- While flap coverage is considered superior to primary closure, no specific flap is preferred, and complications occur in 20-50% of closures.
- The purpose of this study is to compare outcomes of perineal reconstruction with VRAM, gracilis, and omental flaps.

METHODS

- All APR defect reconstructions performed with a flap from 2014-2023 by the senior author were included.
- Post-operative complications were assessed between flap subtype.
- Statistical analysis was performed in R Studio; Significance was achieved with P<0.05.

Disclosures: No disclosures relevant to this study.

RESULTS

	VRAM (N=24)	Gracilis (N=49)	Omentum (N=7)	Total (N=80)
Surgical Site Infection	0.5635			
Yes	3 (12.5%)	10 (20.4%)	2 (28.6%)	15 (18.8%)
No	21 (87.5%)	39 (79.6%)	5 (71.4%)	65 (81.2%)
Delayed Wound Healing	0.3072			
Yes	11 (45.8%)	21 (42.9%)	1 (14.3%)	33 (41.2%)
No	13 (54.2%)	28 (57.1%)	6 (85.7%)	47 (58.8%)
Seroma	0.3700			
Yes	4 (16.7%)	5 (10.2%)	2 (28.6%)	11 (13.8%)
No	20 (83.3%)	44 (89.8%)	5 (71.4%)	69 (86.2%)
Enterocutaneous Fistula	0.1158			
Yes	5 (20.8%)	2 (4.1%)	2 (28.6%)	9 (11.2%)
No	18 (75.0%)	46 (93.9%)	5 (71.4%)	69 (86.2%)
Flap Failure	0.3099			
Yes	1 (4.2%)	0 (0.0%)	0 (0.0%)	1 (1.2%)
No	22 (91.7%)	49 (100.0%)	7 (100.0%)	78 (97.5%)

Table 1. Rates of complications per flap
*Controlling for chemoradiation

*Gracilis OR: 0.11, p = .02

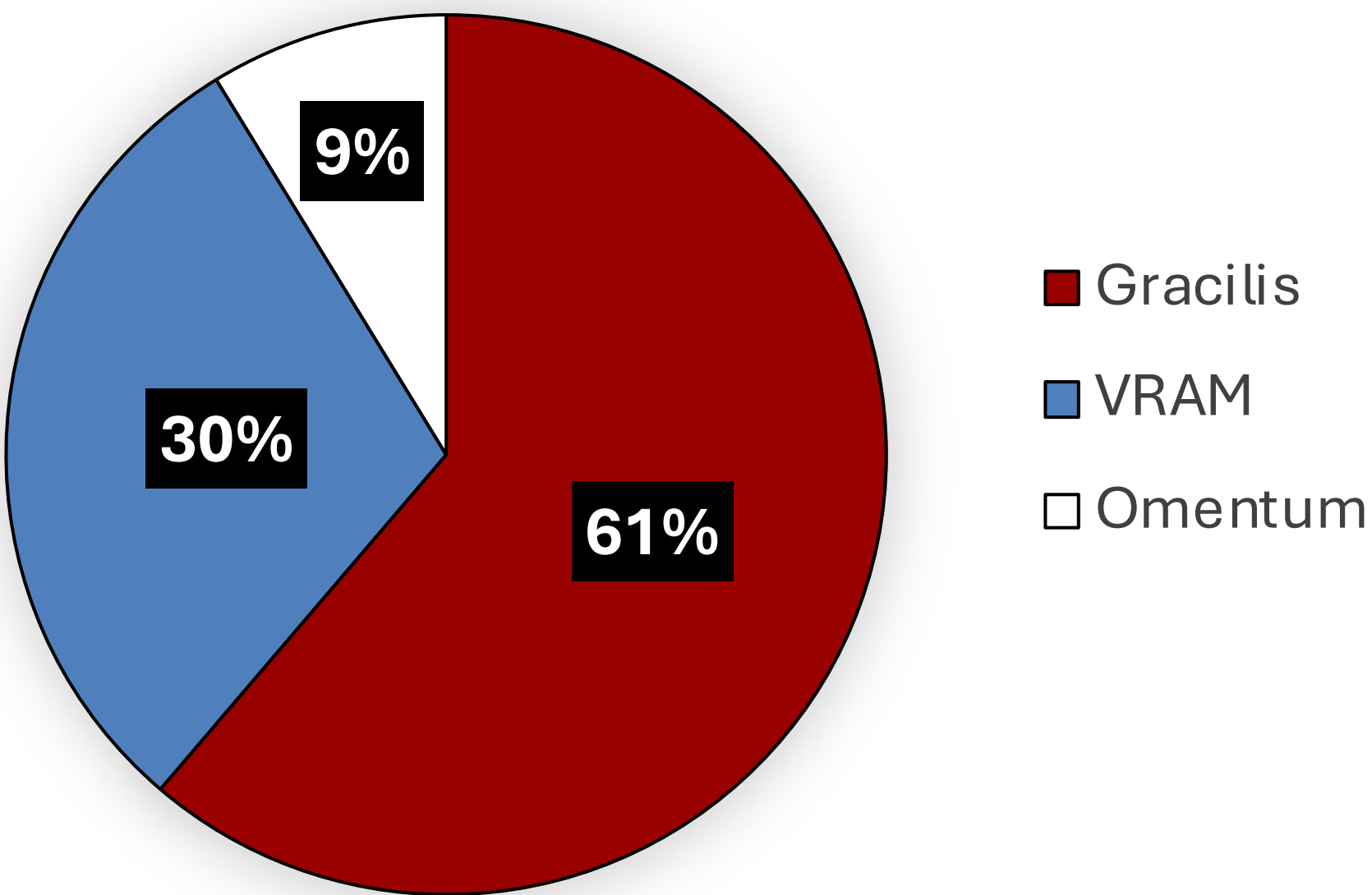


Figure 1. Rates of flap subtype

- Mean Follow-up: 34.9 Months
- Mortality: 25 patients (31%) at a mean 1.84 years
- Fistula formation: More likely in VRAM vs. gracilis flaps
 - *Gracilis OR: 0.11, p = .02

	VRAM (N=24)	Gracilis (N=49)	Omentum (N=7)	Total (N=80)
Readmission	0.5518			
No	6 (25.0%)	17 (35.4%)	4 (57.1%)	27 (34.2%)
Yes	17 (70.8%)	28 (58.3%)	3 (42.9%)	48 (60.8%)
Unknown/ Lost to follow-up	1 (4.2%)	4 (6.2%)	0 (0.0%)	5 (5.1%)
Reoperation	0.8591			
No	9 (37.5%)	19 (38.8%)	4 (57.1%)	32 (40.0%)
Yes	14 (58.3%)	27 (55.1%)	3 (42.9%)	44 (55.0%)
Unknown/ Lost to follow-up	1 (4.2%)	3 (6.1%)	0 (0.0%)	4 (5.0%)
ED Visits	0.5196			
No	20 (83.3%)	35 (71.4%)	6 (100.0%)	61 (77.2%)
Yes	3 (12.5%)	11 (22.4%)	0 (0.0%)	14 (17.7%)
Unknown/ Lost to follow-up	1 (4.2%)	3 (6.1%)	1 (0.0%)	5 (5.1%)
Mortality	0.7533			
No	13 (54.2%)	33 (67.3%)	5 (71.4%)	51 (63.8%)
Yes	9 (37.5%)	14 (28.6%)	2 (28.6%)	25 (31.2%)
Unknown/ Lost to follow-up	2 (8.3%)	2 (4.1%)	0 (0.0%)	4 (5.0%)

CONCLUSIONS

- Our study revealed an overall complication rate of 72.5% (n=58), 55% of whom required an intervention
- Most postoperative outcomes did not significantly differ by flap type.
- ECF formation was more likely after VRAM reconstruction when compared to gracilis flaps.