بسم الله الرحمن الرحيم

وَمَا قَدَرُوا اللَّهَ حَقَّ قَدْرِهِ "
وَالْأَرْضُ جَمِيعًا قَبْضَتُهُ يَوْمَ الْقِيَامَةِ
وَالسَّمَاوَاتُ مَطْوِيَّاتٌ بِيَمِينِهِ سُبْحَانَهُ
وَتَعَالَى عَمَّا يُشْرِكُونَ "

Spade-Shaped Gluteal Advanced Cutaneous Flap for Reconstruction of Large Anal Defects:

10-Years Experience

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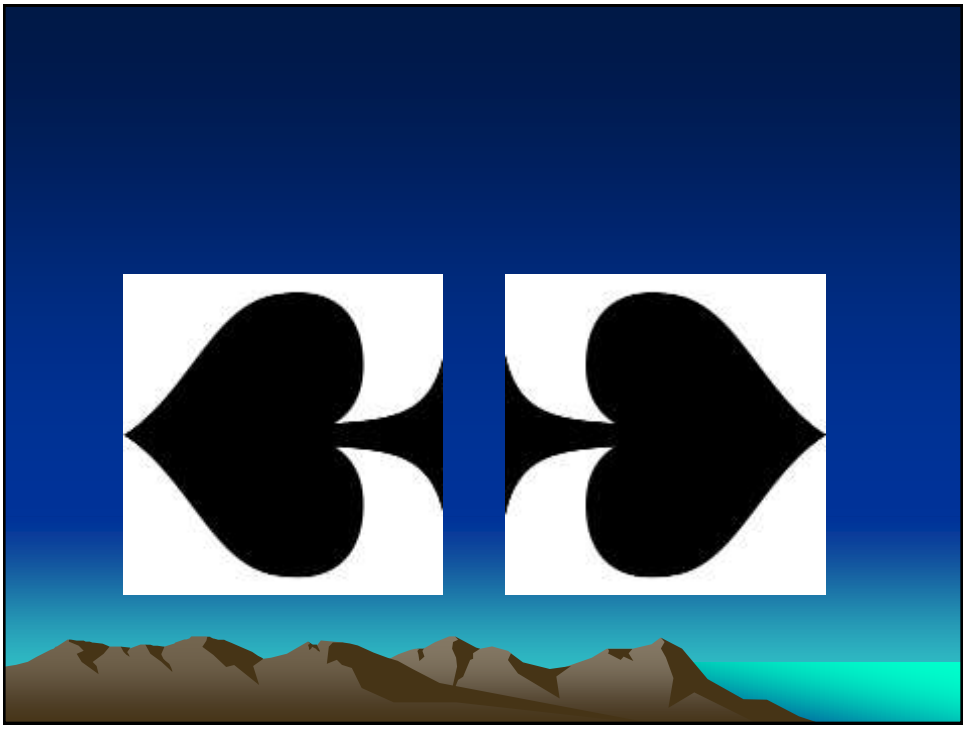


The repair of huge peri-anal defects is a difficult and challenging problem facing proctologists

- With surgical eradication of extensive **anal neoplastic lesions**.
- In some cases of **complex perianal fistulas,**
- With Perineal and anorectal **trauma**

the resulting wide and deep wounds, entail demanding reconstructive procedures for the anal canal .

This can be done as **immediate or delayed** repair for massive tissue loss with or without **covering stoma** .

- **Anal canal reconstruction in such cases is ideally designed to avoid:**
-

- **associated morbidity of a long standing perianal raw area or deep wound**

- **profound deformity and strictures**

- **fecal incontinence**

- **Many procedures for anal reconstruction have been described and performed including**
- **direct wound closure,**
- **musculo-cutaneous (gracilis or gluteus flaps)**
- **hut-shaped flap**
- **V-Y advancement cutaneous F**
- **Hassan** I. et al 2001

Objectives

- This study aimed at assessing the applicability and functional and structural results of Spade-shaped cutanous gluteal flap (a curvy triangle flap with basal broad stem) as a V to Y advancement technique, for reconstruction of massive perianal wounds.

Patients

This study included 20 patients admitted to Colorectal Department, Alexandria University (2005 – 2015).

They were thoroughly assessed for the local indicative lesion and any systemic co-morbidity before being submitted to the procedure.

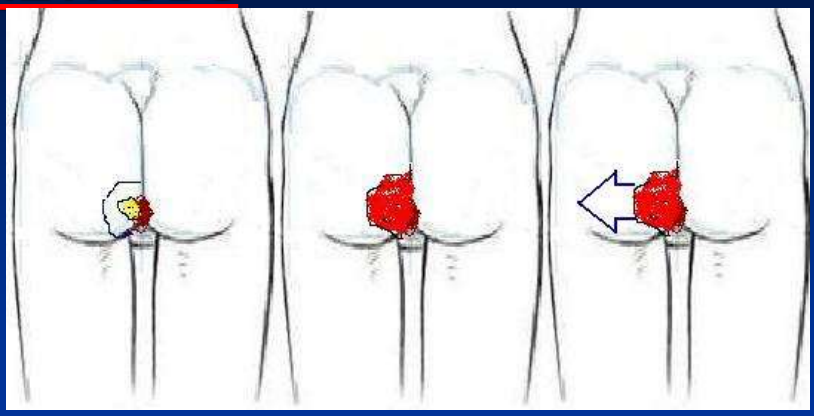
METHODS

The reconstructive Spade-Flap procedure was done with the primary surgical excision, or afterwards.

Pre-operative cleansing of large bowel was done 2 days before surgery in non-diverted cases.

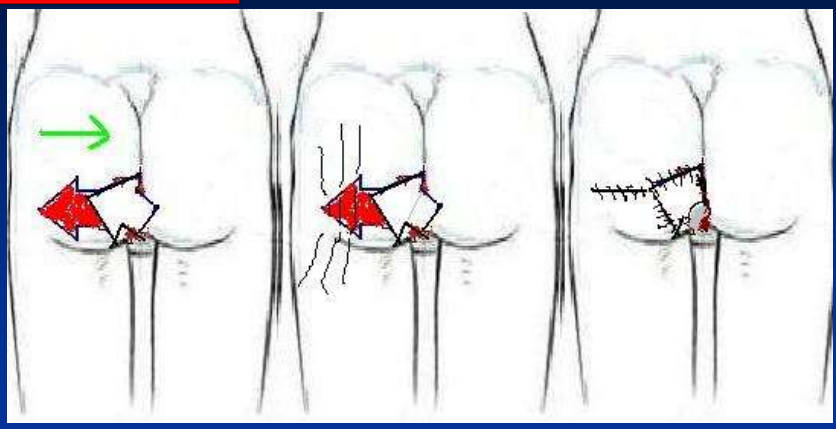
Operation is performed in prone position under general anesthesia.

METHODS



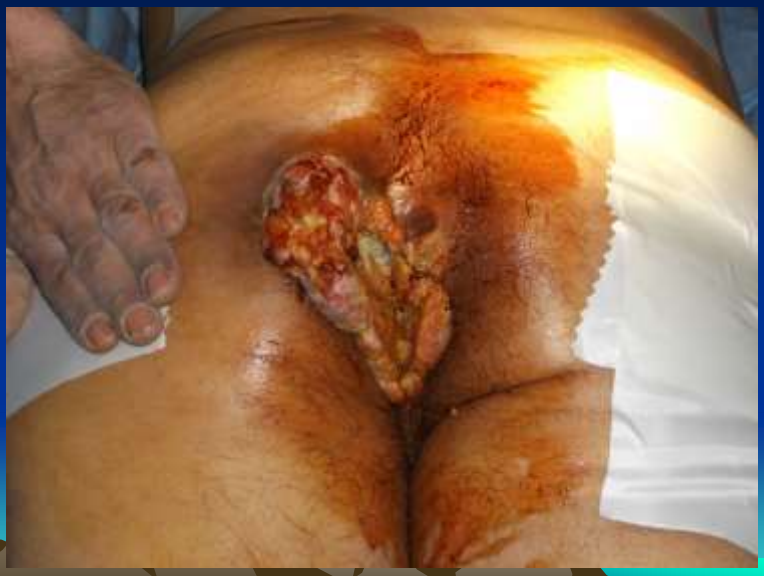
The flap leaf dimensions are determined according to the perianal defect. As regards the stem part (directed towards the midline) the length of the stem is made to line up the anal canal defect extending from level of anal verge to the rectal mucosal cut margin where it is stitched circumferentially

METHODS



Width of stem is to line half of the new anal circumference to be stitched to a contra lateral similar flap at lateral edges to complete a tube. The new anal verge is thus formed where the stem is bent-in from the flap advanced medially. The raw area lateral to the spade flap tip is directly closed

METHODS



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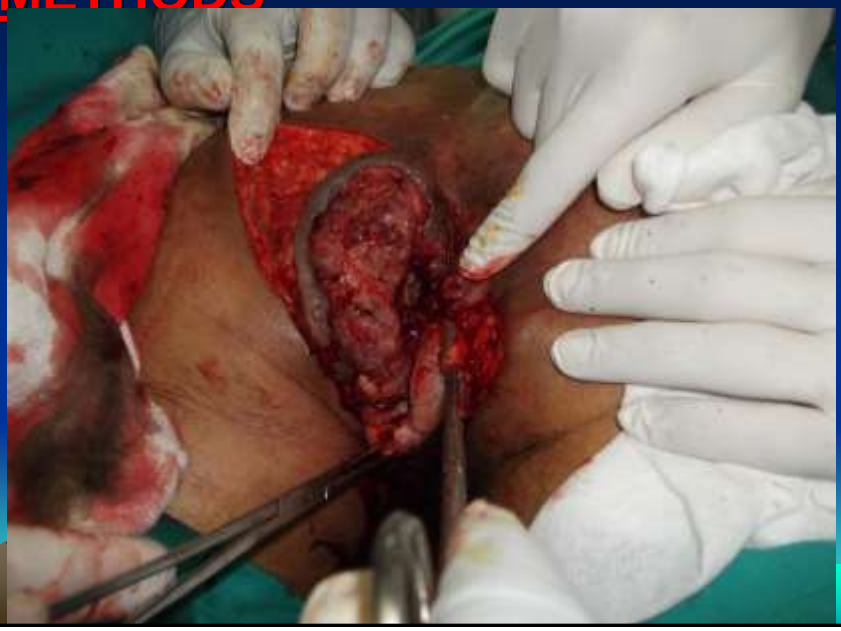

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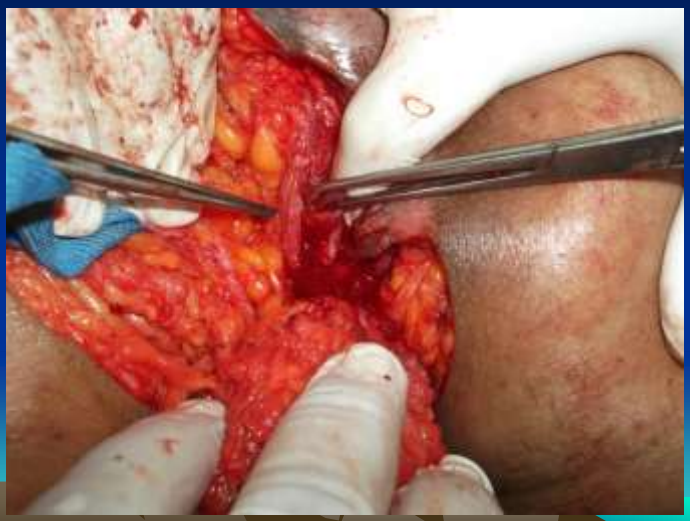

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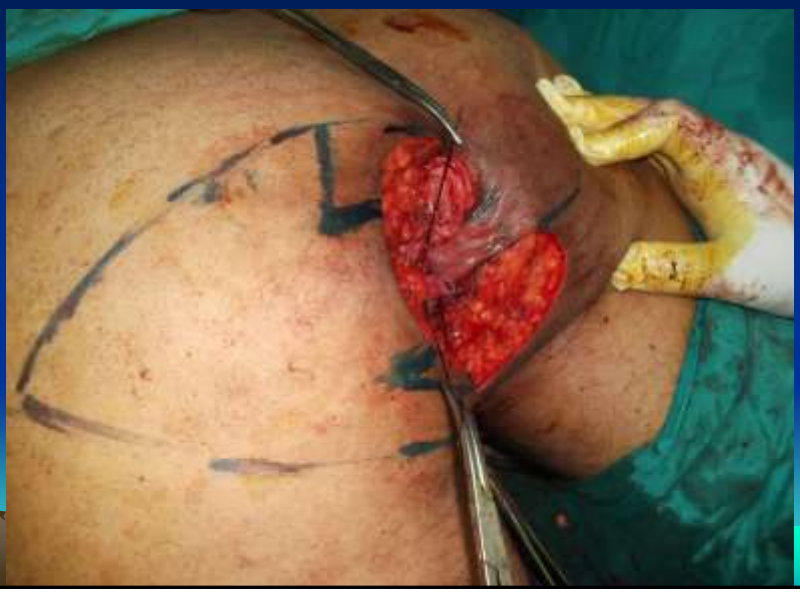

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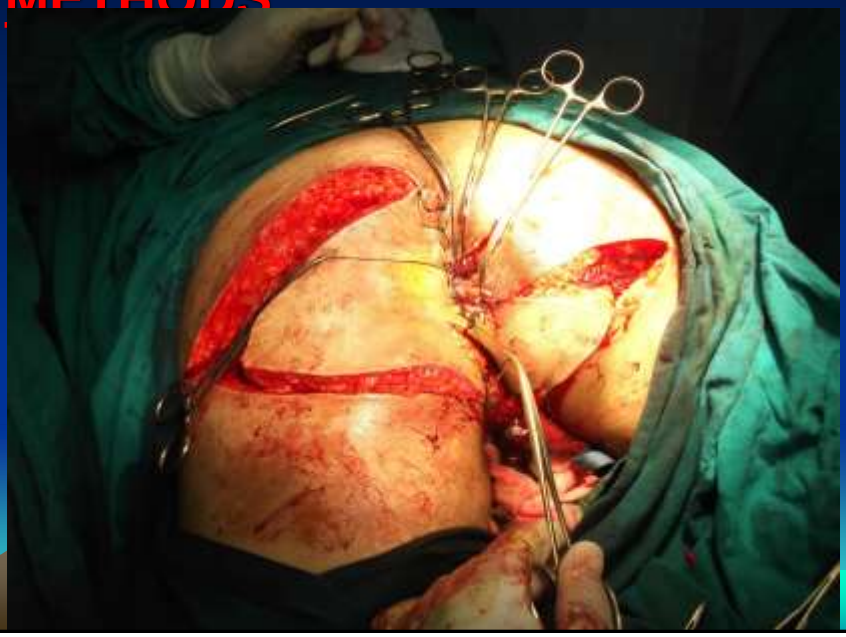

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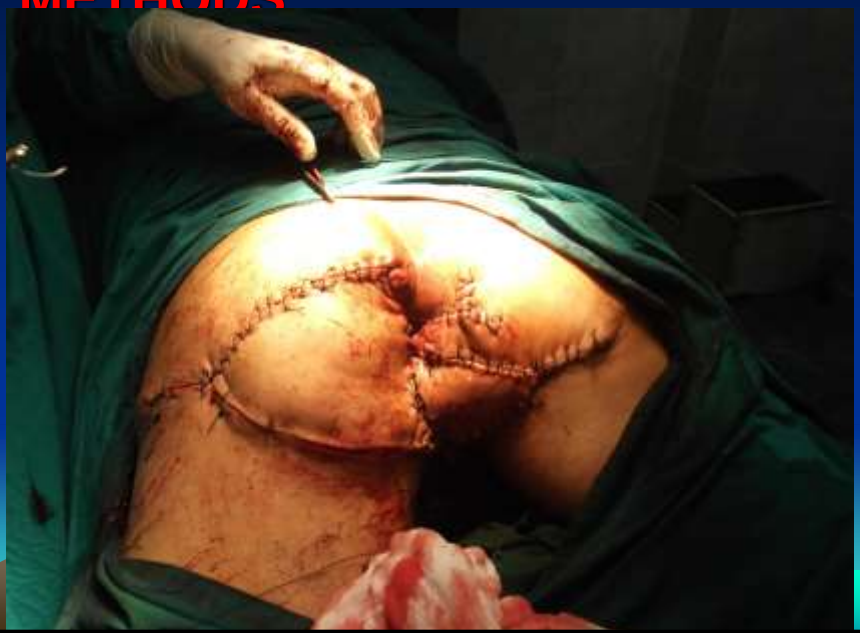


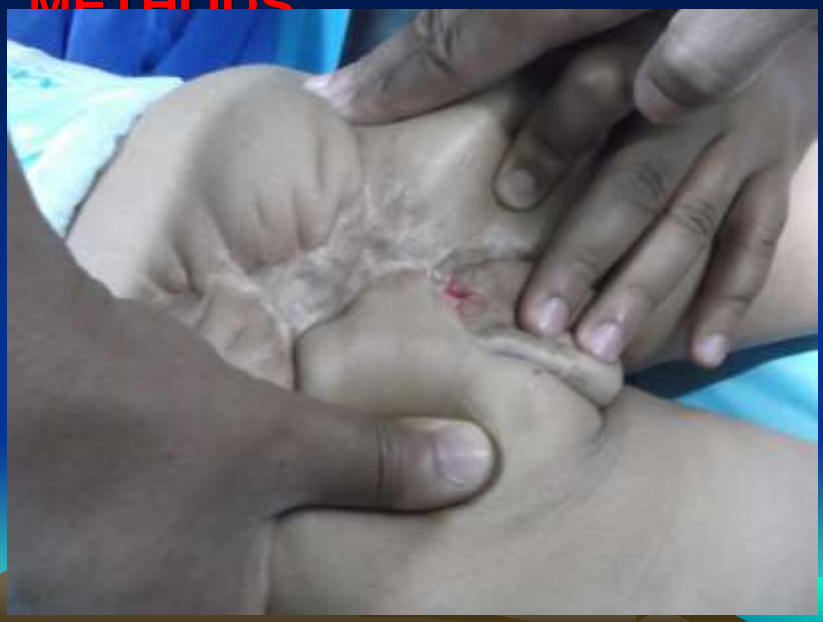
MET

5 days

MET

21 days

METHODS



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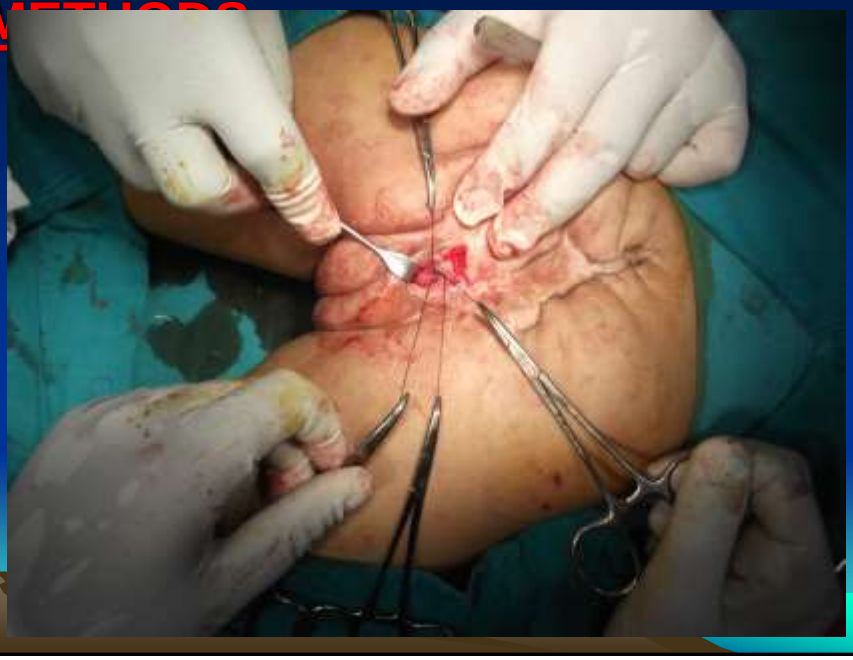


METHODS

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- Proximal diverting colostomy or ileostomy had been inserted in advance, for traumatic, suppurative or congenital lesions with delayed reconstructive flap procedure (9 cases). On the other hand, cases with neoplastic and complex fistula lesions were submitted to same-sitting reconstruction without diversion (11 cases)

METHODS

- Systemic antibiotic as well as local dressing and antiseptics were used for wound care.
- Oral feeding was resumed after the first defecation.
- **Continence was assessed** 3 months after surgery according to Gorge & Wexner Score
- **Follow up** ranged from 1 to 10 years.

RESULTS:

Squamous cell carcinoma,	5
complex fistulectomy,	5
extensive perianal denuding trauma,	4
Fournier's gangrene,	2
perineal 3rd degree burn,	2
anal adenocarcinoma,	1
Deformed anal post operative	1

RESULTS:

Preoperative Data	< 5	5 to <15	15 to 20
Squamous cell carcinoma	3	1	1
Complex preianal fistula	2	2	1
Anorectal trauma	3	1	0
Fournier's gangrene	1	1	0
Perineal burn	2	0	1
Anal adenocarcinoma,	0	1	1
Pin-point anus (neonatal teratoma excision)	0	1	0
Total	11 (55%)	6 (30%)	3 (15)

RESULTS:

- There was no significant difference in data and results in relation to gender and age of patients. There was also no significant difference in results between cases with stoma diversion and those subjected to bowel preparation.
- Blood transfusion range was 2 to 5 units, and the mean operative time was 2.9 hours ± 0.2 with no operative related mortality.

RESULTS:

Case Data	Diverting Stoma 9	No Diversion 11	Total N= 20
Gender M : F	5 : 4	6 : 5	11: 9
Squamous cell carcinoma	0	5	5 *
Complex preianal fistula	0	5	5 *
Anorectal trauma	3	1	4
Fournier's gangrene	2	0	2
Perineal burn	2	0	2
Anal adenocarcinoma,	1	0	1 *
Pin-point anus (neonatal teratoma excision)	1	0	1
Operative Mortality	0	0	0
Flap failure	1	1	2 (10%)
Profound Anal Deformity	3	3	6 (30%)
Anal stricture	1	1	2 (10%)
Perianal suppuration or fistulization	1	1	2 (10%)

RESULTS:

- Sound first intention healing and flap take was obtained 14 patients (70%)
- minor dehiscence 4 (20%),
- failed flap 2(10%),
- perianal fistula 3 cases (15%).

RESULTS:

- **Suppurative** underlying conditions showed significantly higher flap failure than **neoplastic** and **traumatic** cases.
- Anal deformity occurred in 6 cases (30%), of which three could be corrected with dilatation.
- Marked anal stricture occurred in 2 cases (10%) and treated by successive anoplasty

RESULTS:

- Wexner's Score:
- <15 17 cases (85%)
- sever fecal incontinence 3 cases (15%).

RESULTS:

- **Recurrence**
- Malignant lesions 2 / 6 cases (33%)
- Complex fistula 1 / 5 20%

CONCLUSION

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Spade-shaped cutaneous gluteal • advancment flap is applicable, safe, effective procedure for reconstruction of large perianal defects that seem difficult to reconstruct otherwise.

Thank You