

A Case Report On Resection of Perineal scar & Right Gracilis Myocutaneous Pedicled Flap Reconstruction

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OBJECTIVE

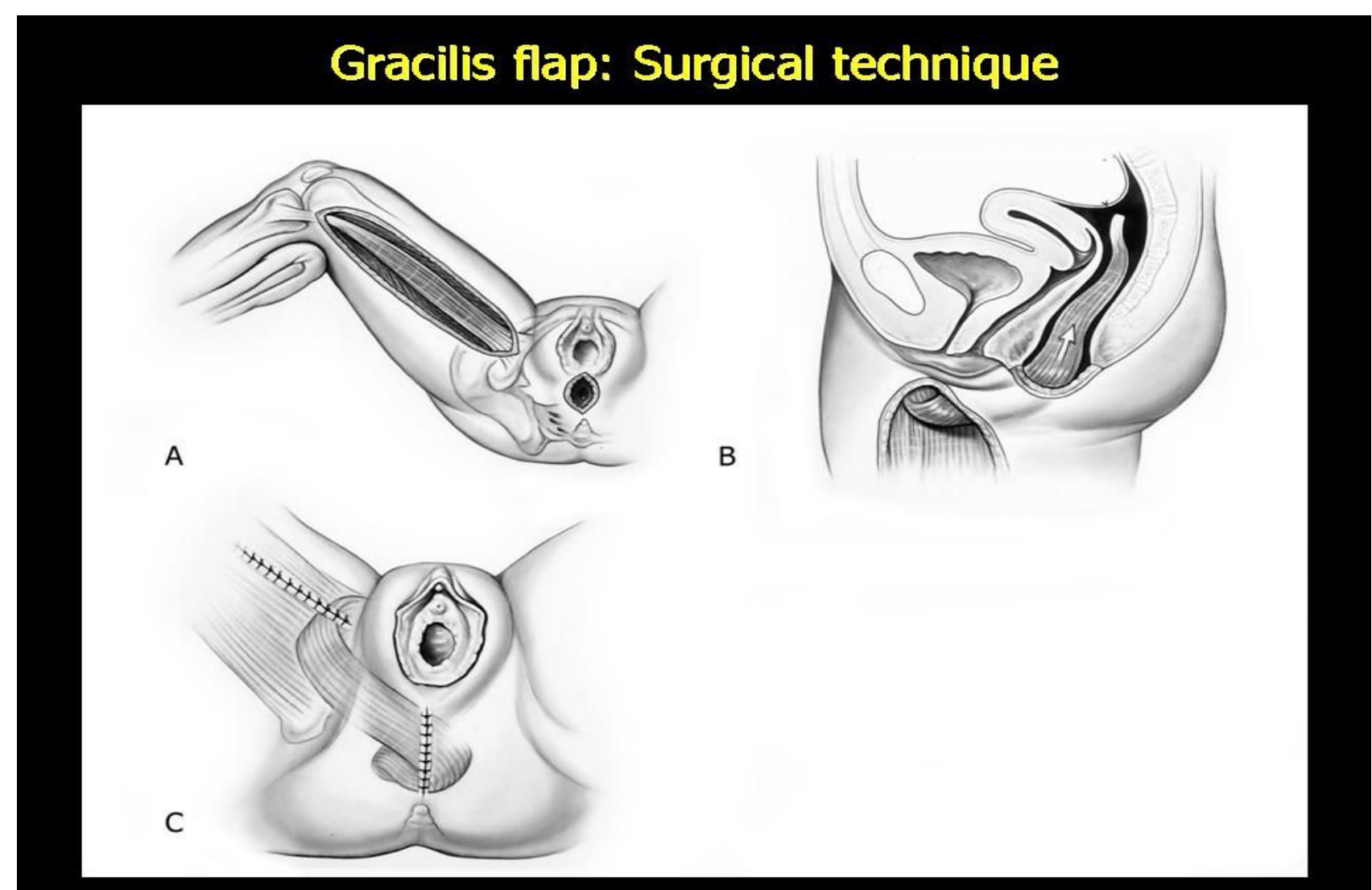
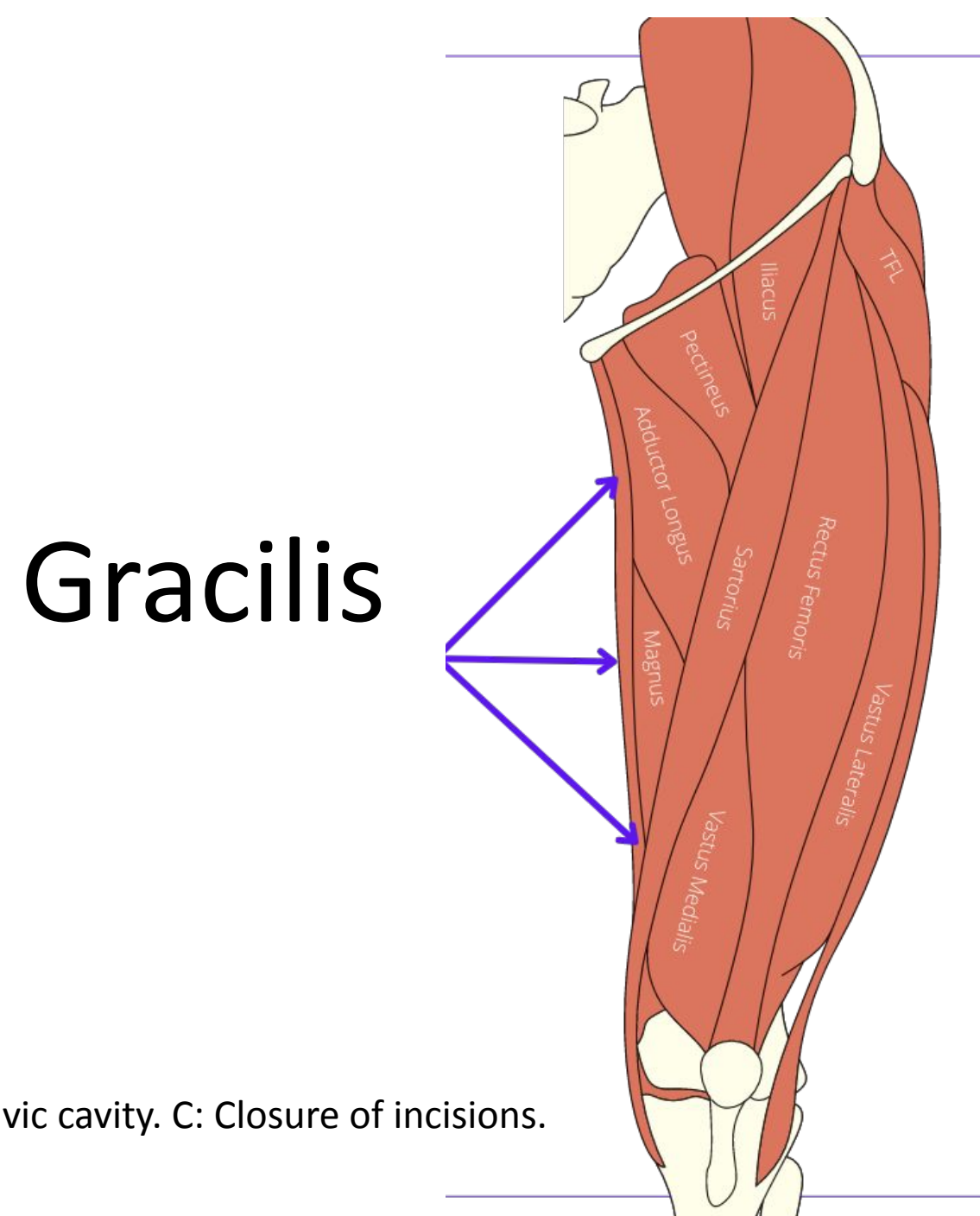
To review the alternative technique of managing perineal scar pain

BACKGROUND

The gracilis muscle has been the donor muscle of choice by many reconstructive microsurgeons. The gracilis flap can be used as a local flap based on its arc of rotation for coverage of wound or reconstruction.

It was first introduced by MCCraw et al in 1976 to augment genital reconstruction. After placing the patient in a lithotomy position, an incision on the medial side of the thigh is made in order to identify the distal part of the gracilis muscle. After dissecting the distal end of the gracilis muscle, it is mobilized to the proximal end, preserving the most proximal vascular pedicle. After completing the dissection, the resulting flap is tunneled subcutaneously in order to reach the perineal defect where it is fixed by using separate stitches. Once the reconstructive phase is completed, the defect from the thigh is closed in one layer

Source: Bacalbasa, Nicolae; Balescu, Irina; Mereuta, Andreea; Tanase, Alina; Ghelmene, Adriana; Vilcu, Mihaela; and Brezean, Iulian (2019) "Gracilis myocutaneous flap for perineal defect reconstruction after left hemivulvectomy for locally invasive vulvar cancer – A case report and a literature review," Journal of Mind and Medical Sciences: Vol. 6 : Iss. 1 , Article 27. DOI: 10.22543/7674.61.P176180 Available at: <https://scholar.valpo.edu/jmms/vol6/iss1/27>



Source: **Fig.:** Gracilis flap: Surgical technique. A: Incision over muscle. B: Transposition of flap into pelvic cavity. C: Closure of incisions

References: Shibata et al, (1999) Ann Surg Oncol 6:33-7 [Ref 9]

CASE REPORT

66 year old postmenopausal nulliparous female underwent a total abdominal hysterectomy and bilateral salpingo-oophorectomy at the age of 28 for endometriosis and previously treated for lichen sclerosis.

She was diagnosed with diverticulitis and underwent a Laparoscopic Hartmann's procedure in 2016 with an end colostomy followed by a laparoscopic completion proctectomy and perineal dissection using Transanal Endoscopic Microsurgery.

Due to perineal pain & dyspareunia, patient had an excision of a ridge of vaginal skin followed by a series of injections of Kenalog steroids with local anaesthetic to perineal scar from 2019 to 2020.

In 2021, the patient had a defecating proctogram MRI which ruled out possible parastomal or perineal hernias as a possible contributory cause to her symptoms. Despite the perineal scar revision and treatment with steroid injections, patient continued and experienced an increased chronic perineal pain.

Therefore in 2022, patient had an en-bloc excision of perineal scar tissue with a right myocutaneous gracilis pedicled flap reconstruction in its place.

Subsequent out-patient follow-ups showed a well healed flap on the perineum as well as the donor site

DISCUSSION

Perineal pain from previous surgical procedures/scar tissue can lead to negative consequences such as reduced mobility, urinary and faecal incontinence and sexual dysfunction.

These in turn often leads to reduced quality of life and unnecessary suffering. Various treatments to relieve perineal pain have been used in clinical practice, such as local anaesthetics, oral analgesics, and conservative measures such as ice packs, perineal massages and baths. Local anaesthetics and steroids are widely used due to their potent analgesic and anti-inflammatory activities.

Perineal surgery is challenging due to the complex anatomy and physiology, multi-organ involvement and microbial environment of this region. In reconstructive surgery local and pedicled flaps are often and usually utilized.

Misjudged positioning of the flap and undue tension on its final grafting, coupled with its location that are prone to moisture and pressure, may lead to more complications including flap breakdown rather than leaving an original defect. The myocutaneous gracilis flap and its alternative flap, the gluteal fold flap are common options for defect coverage in the perineal area.

The gracilis muscle myocutaneous flap is a local, well-vascularized option suitable for perineal soft tissue reconstruction, particularly for moderately sized defects of the groin and perineum.

Conclusion

A gracilis myocutaneous pedicled flap reconstruction of the perineum is a feasible treatment option for a refractory chronic perineal pain. This requires a flexible multidisciplinary team co-operation approach so that treatment may be individualized to optimize the outcome..