



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

SURGICAL APPROACHS FOR SYMPTOMATIC ISTHMOCELE

دکتر مریم اشرفی
فلوشیپ لاپاراسکوپي، هیستروسکوپي
بیمارستان جامع بانوان ارش
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- ▶ **A systematic review and meta-analysis**
- ▶ *Archives of Gynecology and Obstetrics* (2020)

33 PUBLICATIONS WERE RETRIEVED :
28 FOCUSED ON A SINGLE SURGICAL TECHNIQUE,
FIVE COMPARING DIFFERENT TECHNIQUES.

META-ANALYSIS SHOWED AN IMPROVEMENT OF SYMPTOMS IN
85.00% (75.05–92.76%) OF WOMEN AFTER HYSTEROSCOPIC
CORRECTION,
92.77% (85.53–97.64%) AFTER LAPAROSCOPIC/ROBOTIC
CORRECTION,
82.52% (67.53–93.57%) AFTER VAGINAL CORRECTION

► Presentation

ASYMPTOMATIC : (2/3)

symptoms more common if residual myometrial thickness (rmt) <50% of adjacent myometrium

AUB: 30-80% with niche may have AUB

- often postmenstrual spotting or IMB secreting blood / mucous from niche which is hypervascular or has endometriosis within the scar

pelvic pain / dysmenorrhea: 34-68% of patients with niche have pain

INFERTILITY : 10% reduction in fertility after c/s

DIAGNOSIS

ULTRASONOGRAPHY

24-70% post CS

- ideally performed on follicular phase cycle D7-14

essential measurements especially for the planning or surgery:

sagittal:

§ height

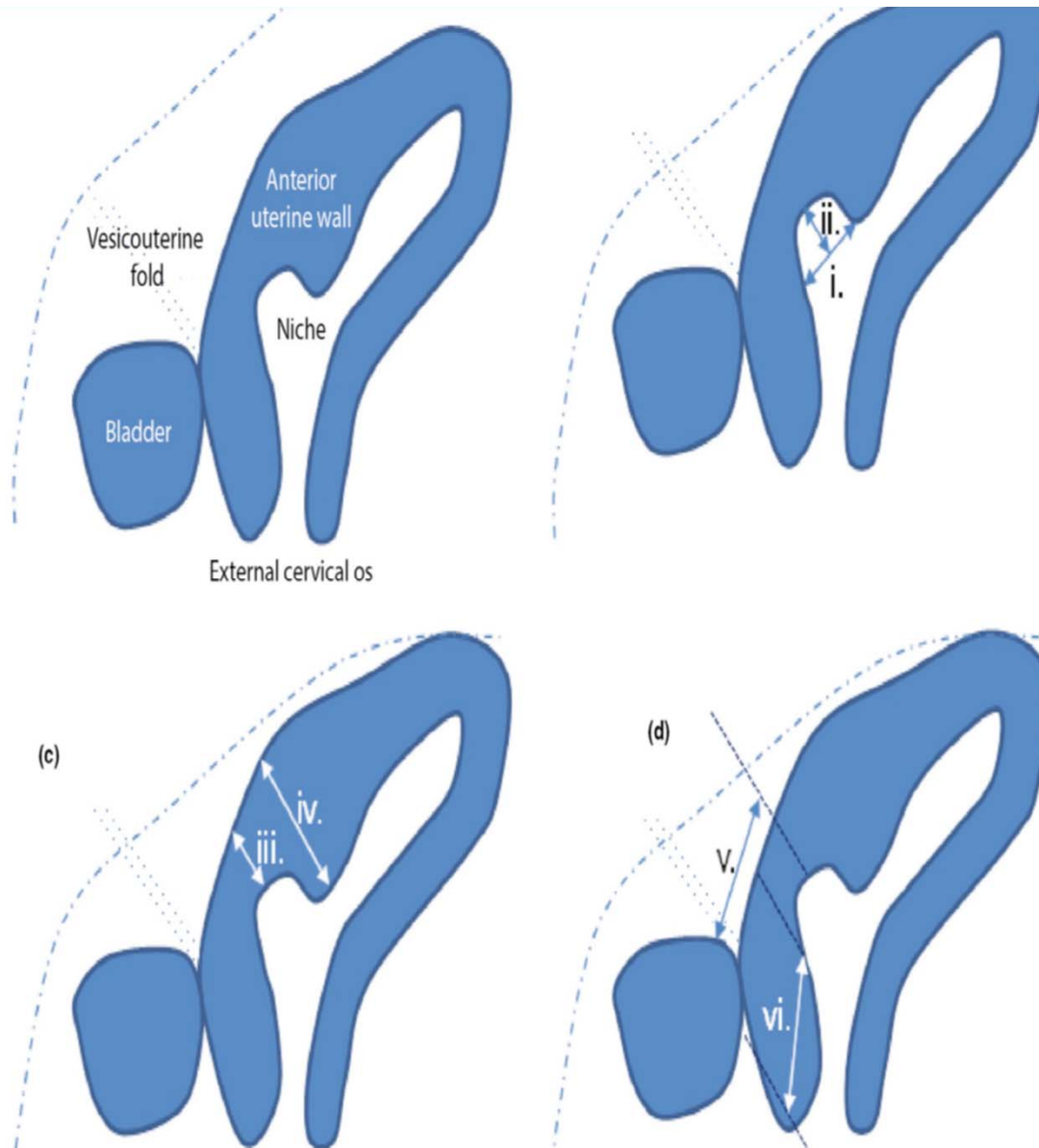
§ depth

§ distance from external os

§ bladder fold (vesicovaginal fold) to apex niche

§ RM and adjacent myometrial thickness (AMT)

transverse



SSG

- 56-84% post CS
- more sensitive and specific than TVUS
- planning for surgical treatment
- potentially niche may appear bigger due to fluid distension

MRI

good correlation MRI and US to histology

Management

Depends on:

- Symptoms
 - Bleeding
 - Pain
 - infertility
 - Size
 - Future pregnancy
- 

Surgical Approaches

HYSTROSCOPY

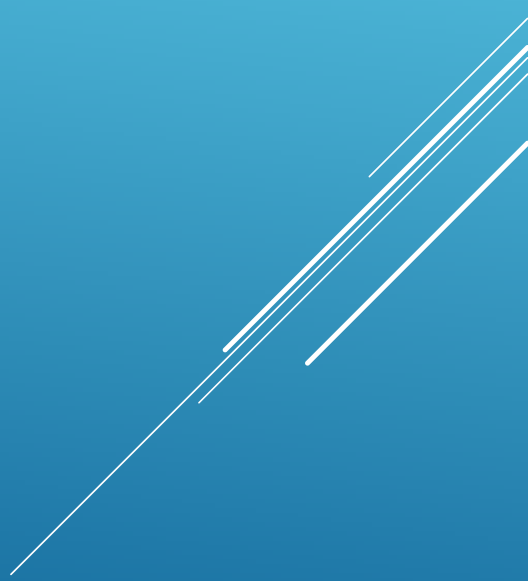
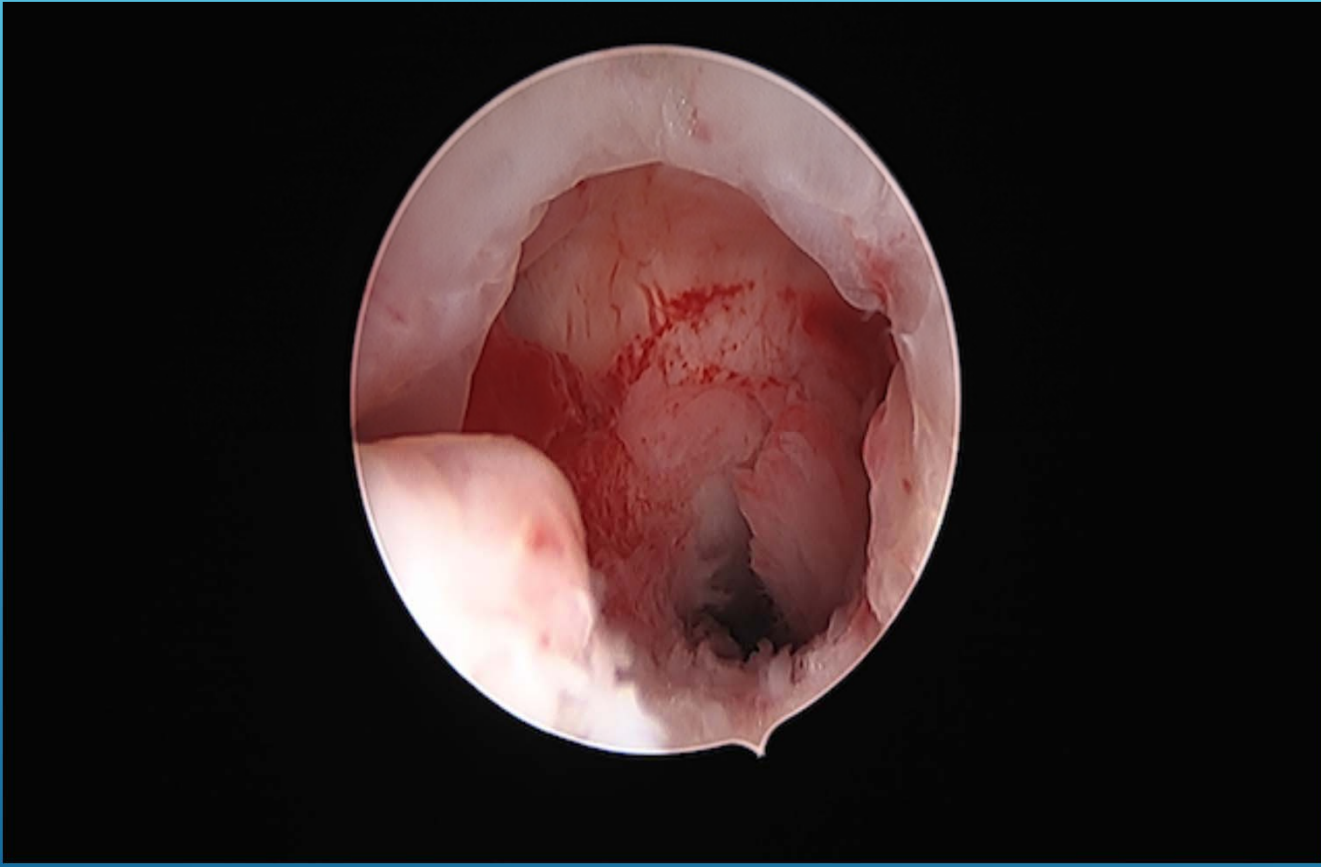
Some studies suggest RM >3mm with D/RMT ratio <50%

A cavity like defect seen in upper cervix
– vessels branching or punctuation

Thechnic:

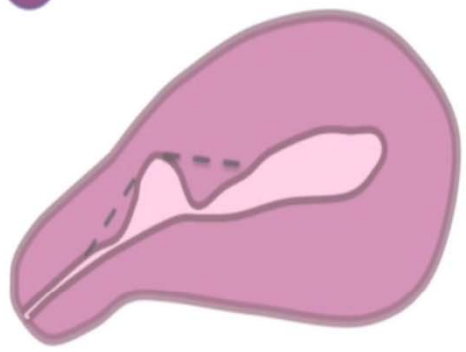
- Instillation blue dye in the bladder assists ID perforation
- Resect lower edge (distal)
- Resect upper edge (proximal) omitted in some studies concern about weakening of weakening cervix and cervical IC
- Ablate base

Risks: Bladder or utrine perforation

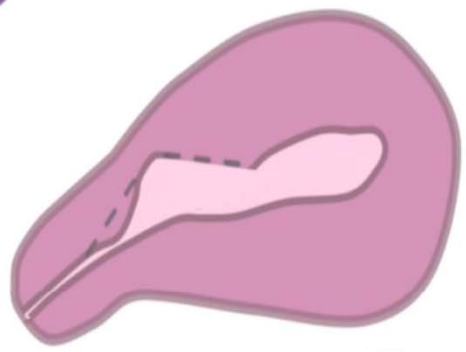


Review Steps of the Procedure

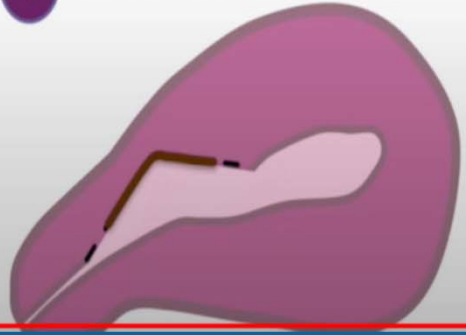
1 Identify the Anatomy



2 Resect the Cephalad Edge



4 Ablate the Isthmolele



3 Resect the Caudad Edge




Laparoscopic repair

Criteria:

- ▶ • RMT < 3mm
- ▶ • Wants to preserve fertility
- ▶ **Technique**
- ▶ • Combined laparoscopic / hysteroscopic surgery
- ▶ • ID the niche from below (typically hysteroscope which can transilluminate the defect and delineate the borders of the niche)
- ▶ • Dissect the bladder off lower segment
- ▶ • Excise scar tissue
- ▶ • Hysteroscope / Dilator in the cervical canal
- ▶ • Repair in 1 or 2 layers — peritoneum ((0) or 2(0) vicryl / PDS with (0) V lock)
- ▶ • Shorten round ligaments (esp retroverted uterus)

Vervoort 2018

- ▶ N= 101 FU 6 month with US
 - ▶ • Symptomatic with RM <3mm
 - ▶ • Increased myometrial thickness (1.43mm-9.62mm on MRI)
 - ▶ • Bleeding 90% improvement
 - ▶ • Pain 90% improvement
 - ▶ 45% pregnancy after hx of infertility
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▶ **Vaginal**

- ▶ Similar improvement of symptoms. about 86% in AUB
- ▶ More cost effective vs laparoscopy
- ▶ More blood loss than hysteroscopic approach
- ▶ Maybe challenging IDED scar defect vaginally with transillumination
- ▶ Unable to visualise other pathology
- ▶ Needs experienced vaginal surgeon
- ▶ Steps
 - ▶ • Vaginal

Steps

- ▶ • Vaginal incision
- ▶ • Dissect bladder off the cervix/ lower segment
- ▶ • Incise bladder peritoneum
- ▶ • ID niche and excision (aided palpation + hysteroscope)
- ▶ • Repair in 2 layers

Hysterectomy

- ▶ Ultimate treatment in those not desiring pregnancy.

