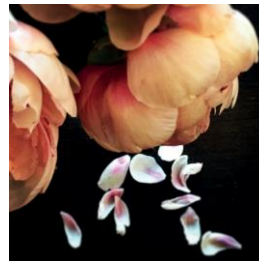
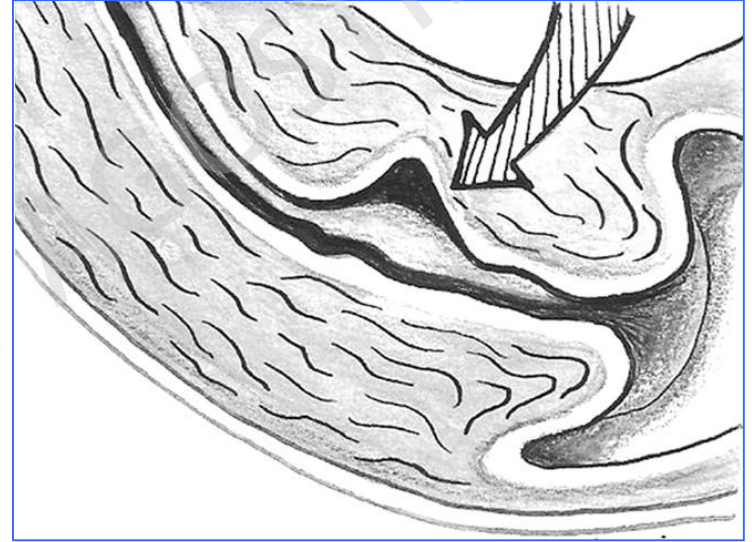


Isthmocéle et grossesse dans la cicatrice Prise en charge chirurgicale

Aubert Agostini, Marseille

Collège de Gynécologie Médicale
Marseille-Provence





Borges et al. JMIG 2010

Etiologie

Différence d'épaisseur entre la tranche supérieure et inférieure permet la création d'un réservoir

Thurmond et al. J Ultrasound Med. 1999

Technique de fermeture ischémiant

Fabres et al. J Ultrasound Med. 2003

Fermeture par suture superficielle
Fermeture en un plan

Hayakawa et al. Acta Obstet Gynecol Scand 2006

Yazicioglu et al. Eur J Obstet Gynecol Reprod Biol 2006

Prévalence

Isthmocéle diagnostic échographique

24 à 70% dans l'ensemble de la population avec au moins un ATCD de césarienne

Symptômes

Relation grossesse sur cicatrice de césarienne

Et isthmocéle

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Symptômes

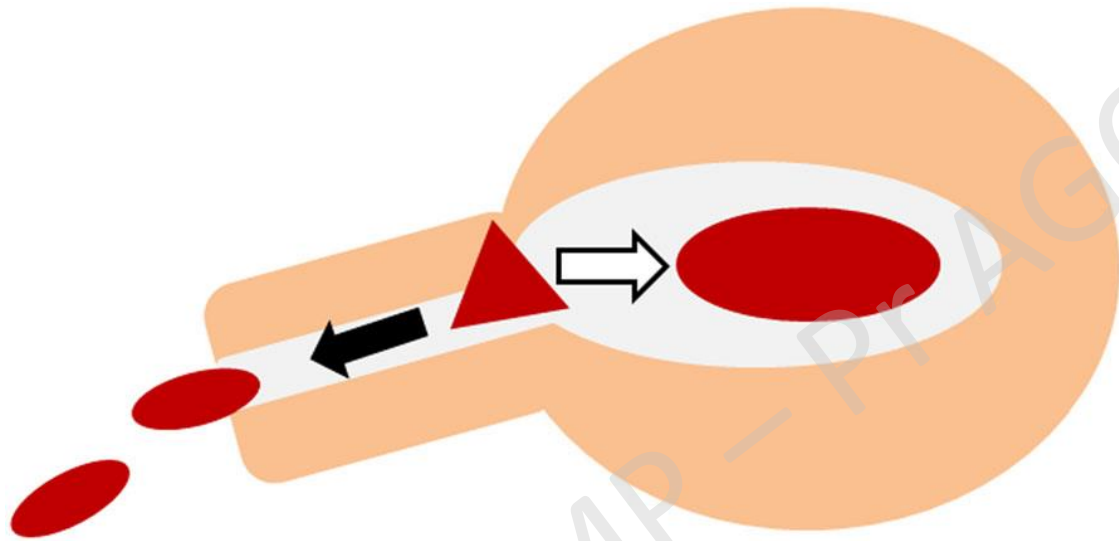
Saignements post cataméniaux

Dysménorrhées

Douleurs chroniques

Dyspareunie

Fertilité secondaire



Tanimura et al. J Gynaecol Obstet Res 2015

Etiologie

Accumulation de sang

Effet réservoir

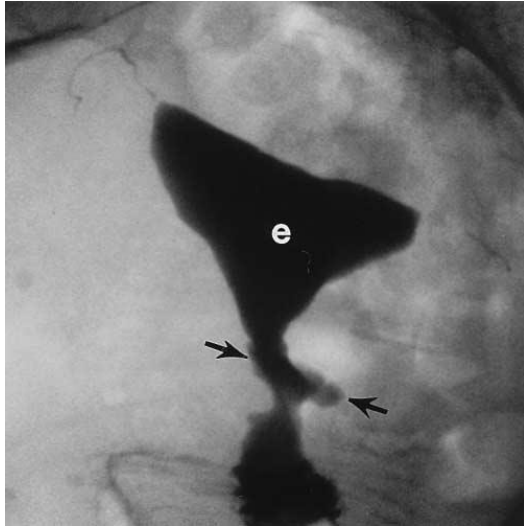
Absence de contractilité de la zone favorise l'accumulation de sang

Thurmond et al. J Ultrasound Med. 1999

Production locale de sang

Morris H. Int J Gynecol Pathol. 1995

Hystéroggraphie

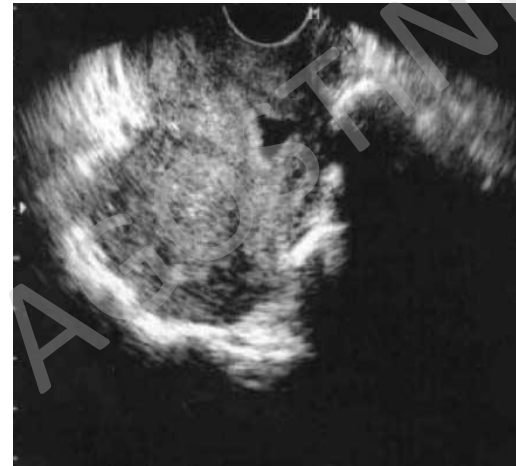


Thurmond et al. J Ultrasound Med 1999



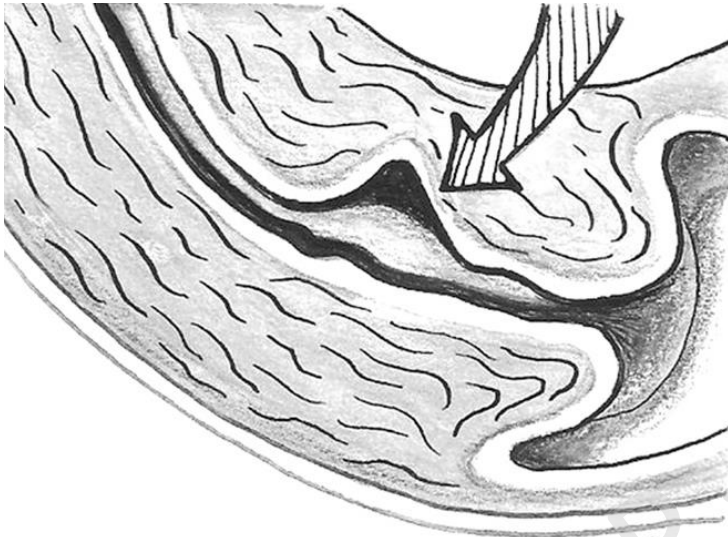
Tower et al. JMIG 2013

Echographie



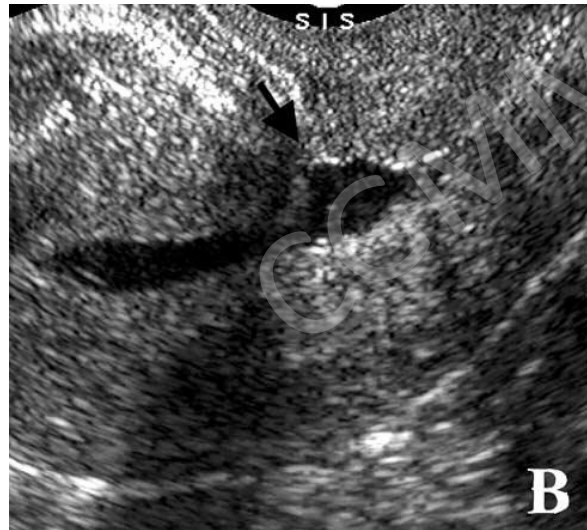
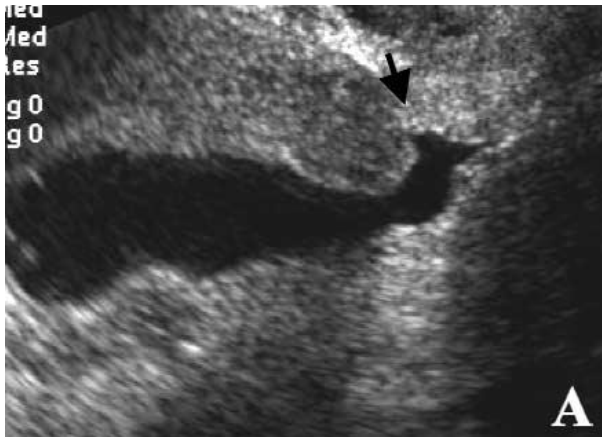
Fabres at L.J Ultrasound Med 2003

Sonohystérogographie



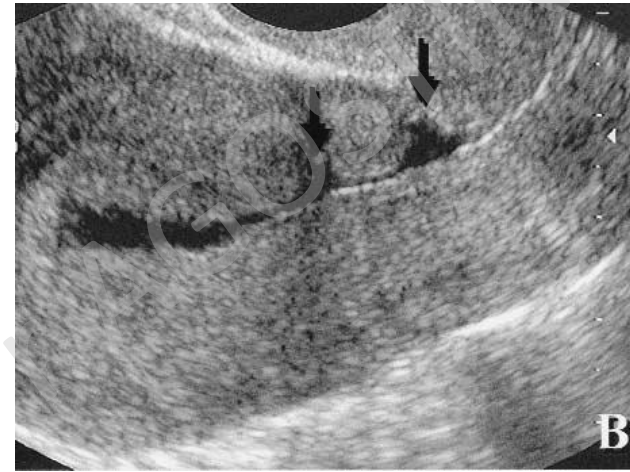
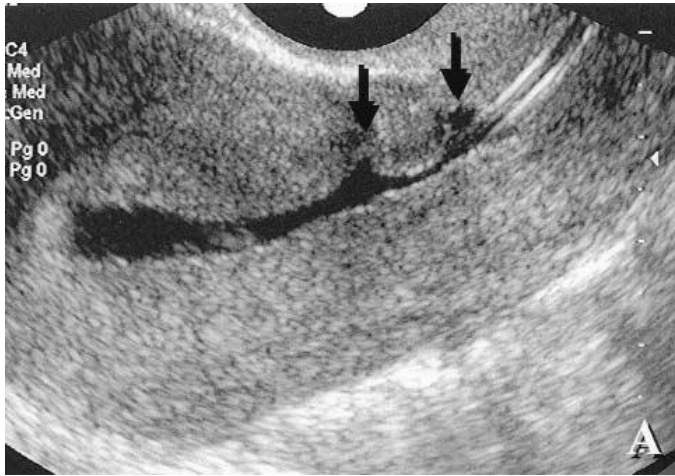
Borges et al. JMIG 2010

Sonohystérographie



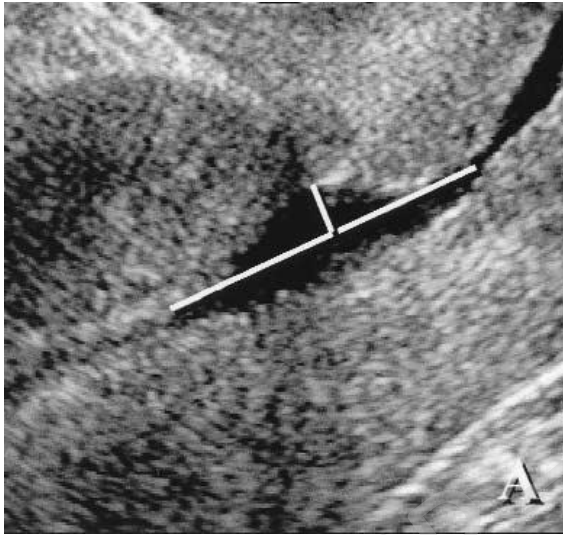
Monteagudo et al. J Ultrasound Med 2001

Sonohystérographie



Monteagudo et al. J Ultrasound Med 2001

Sonohystérographie



Monteagudo et al. J Ultrasound Med 2001

Sonohystérographie

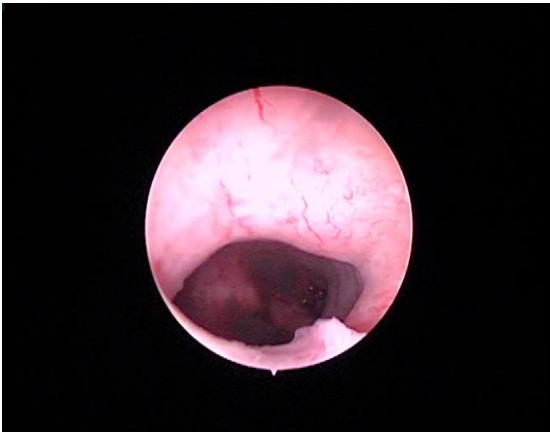
83% triangulaires, 2% rondes, 4% ovales, 10% defect complet (n:162)

Vikhareva Osser et al. Ultrasound Obstet Gynecol 2009

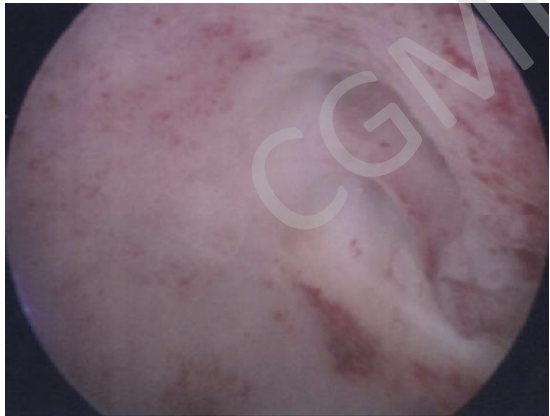
Taille de 2,2mm chez une patiente avec un antécédent de césarienne

Osser et al. Ultrasound Obstet Gynecol 2010

Aspects hystéroscopiques

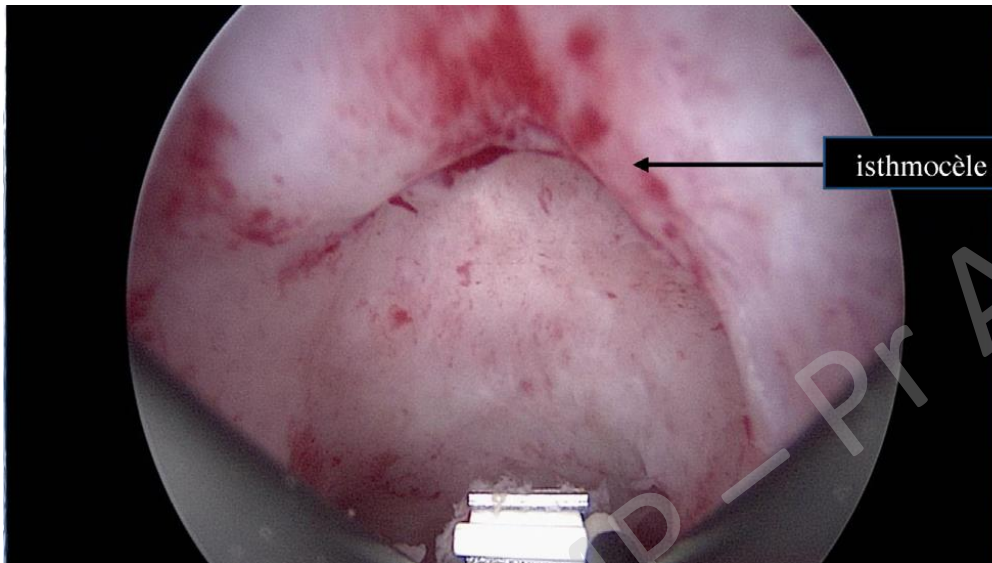


Borges et al. JMIG 2010



Tower et al. JMIG 2013

Aspects hystéroscopiques



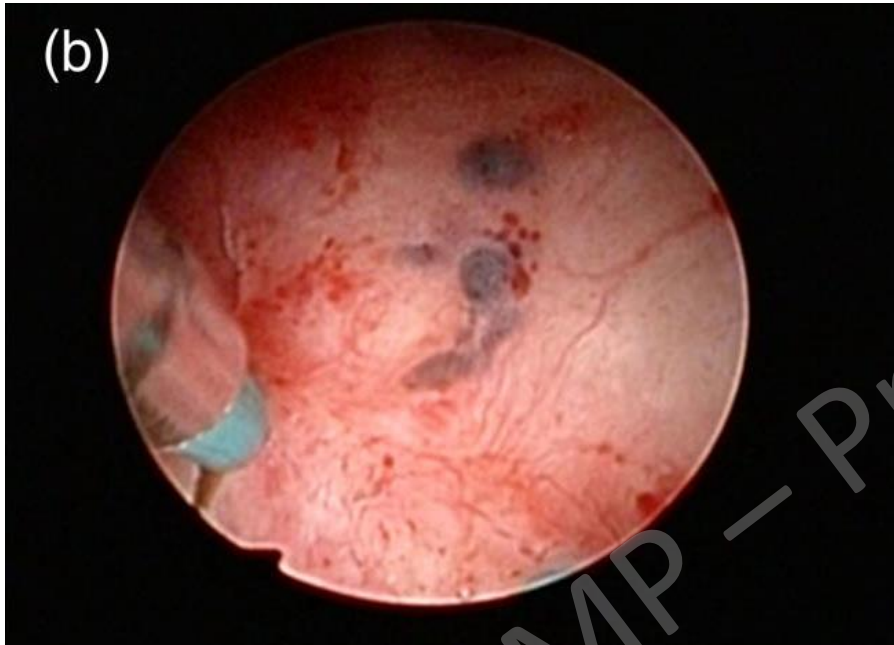
Fernandez et Al. Gynecol Obstet Fertil 2015

Aspects hystéroscopiques



Masuda et al. BMC Pregnancy Childbirth 2015

Aspects hystéroscopiques



Tanimura et al. J Gynaecol Obstet Res 2015



IRM



Traitement chirurgical

Coelioscopie

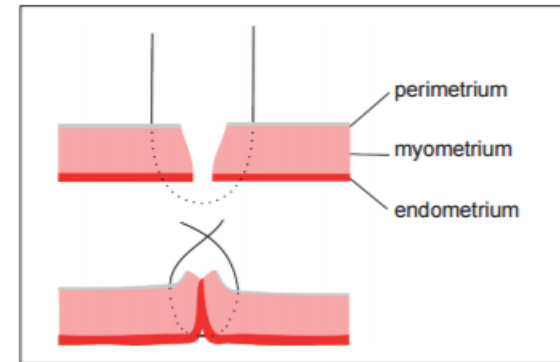
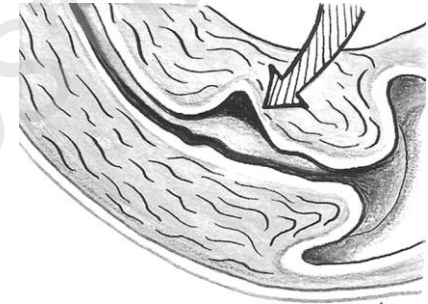
Hystéroskopie

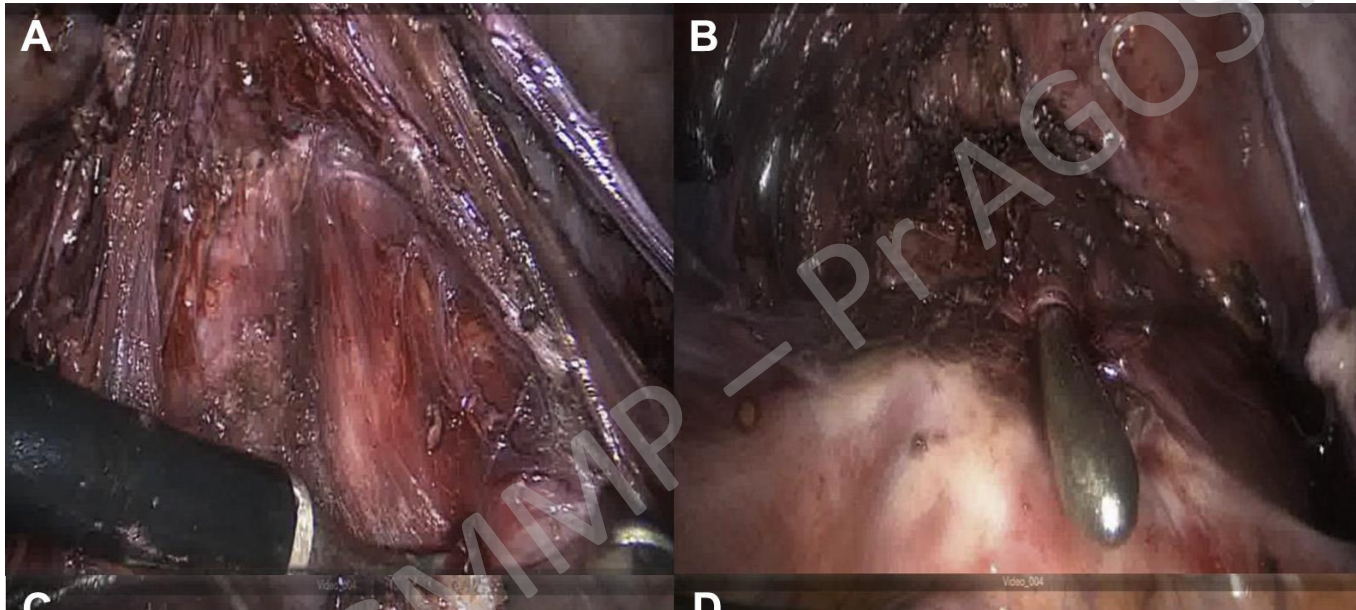
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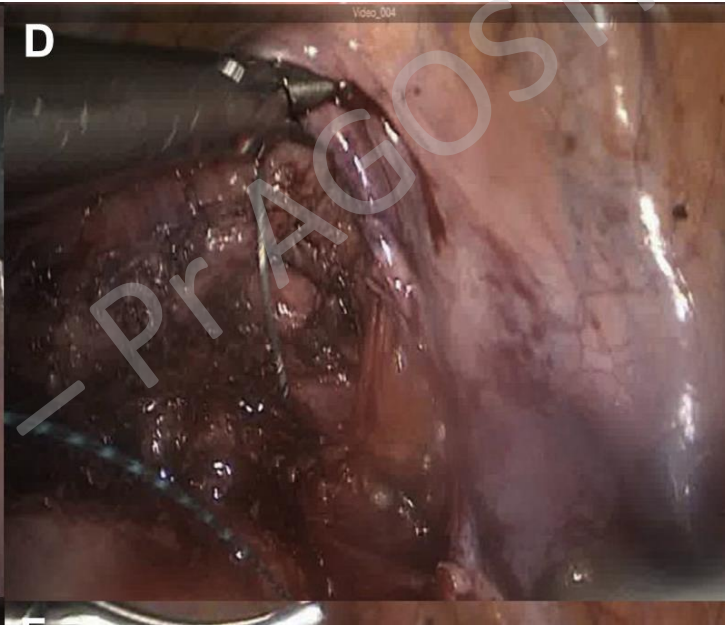
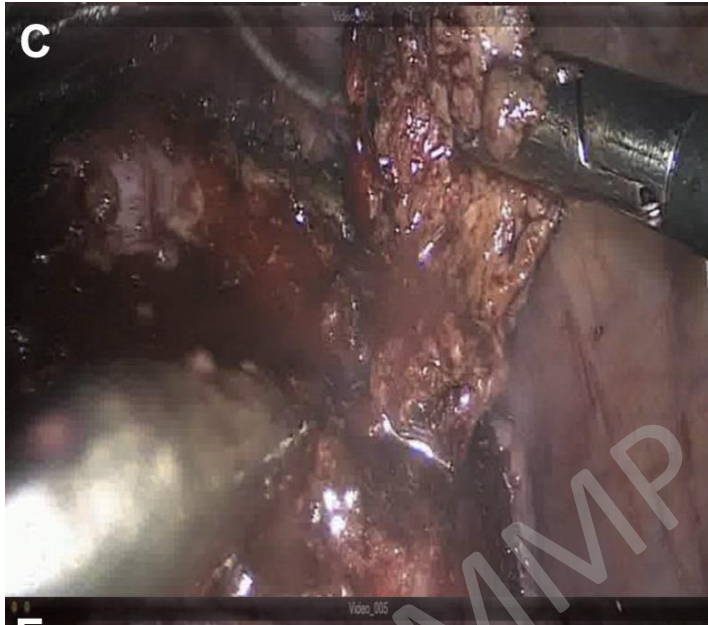
Traitement chirurgical

Coelioscopie

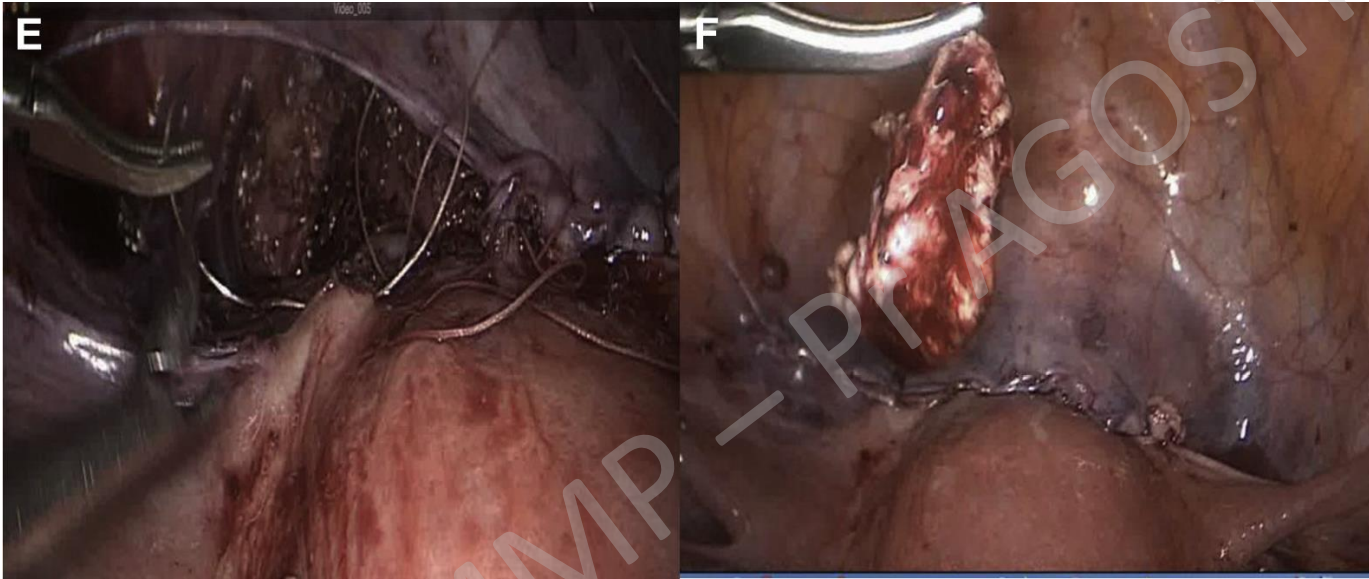
Correction du défaut
Consolidation du myomètre

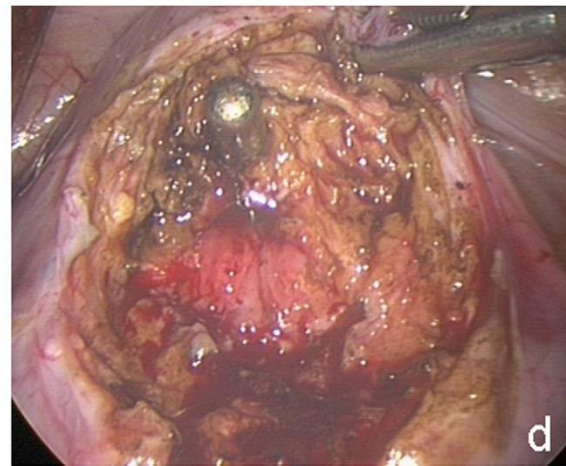
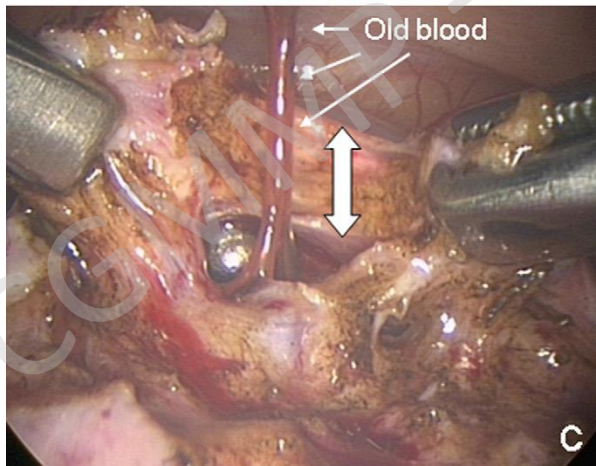
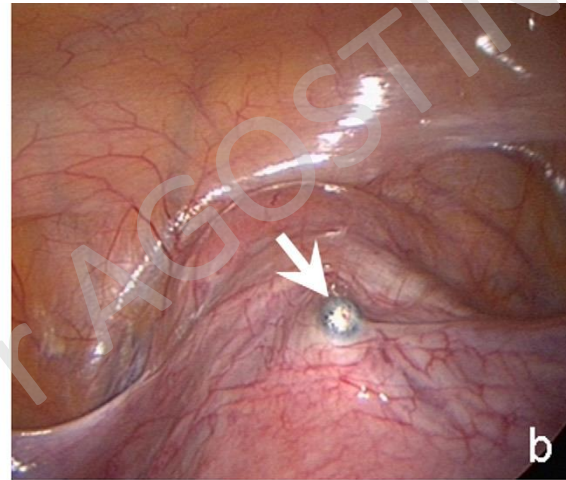
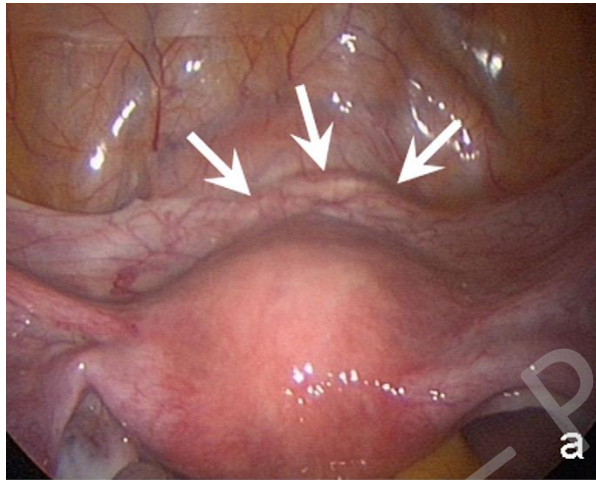


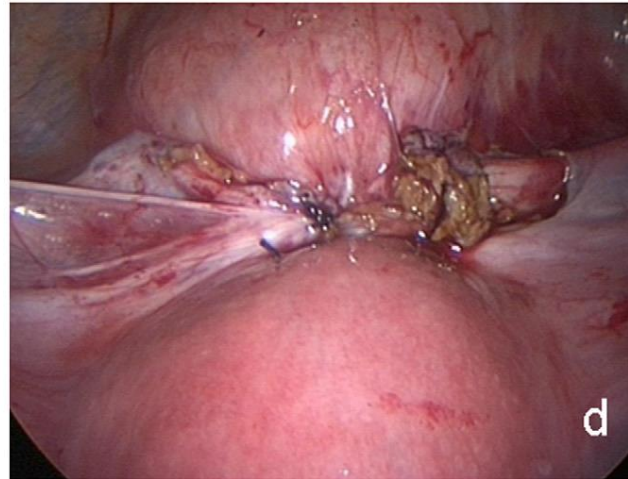
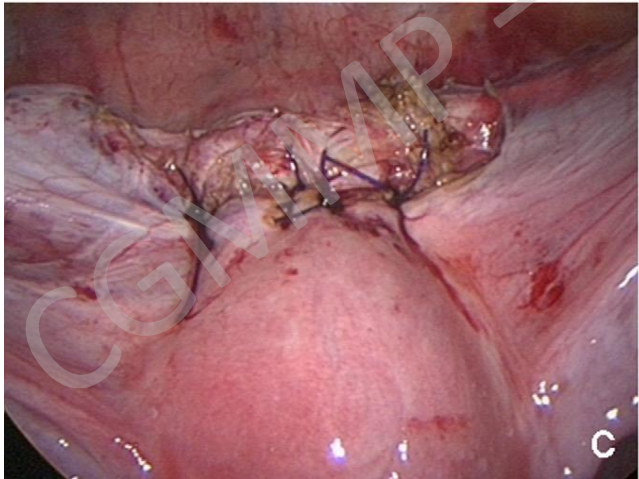
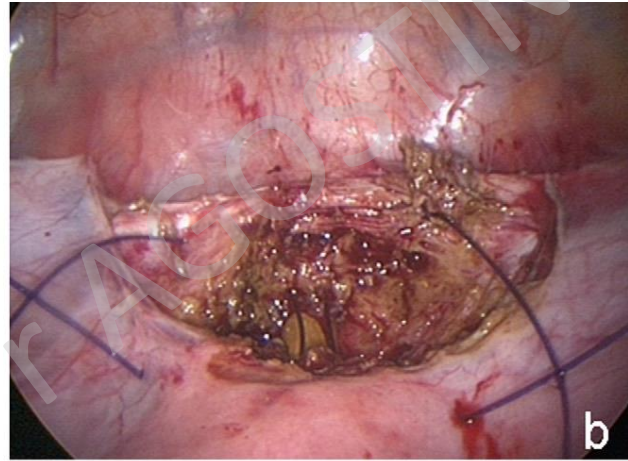
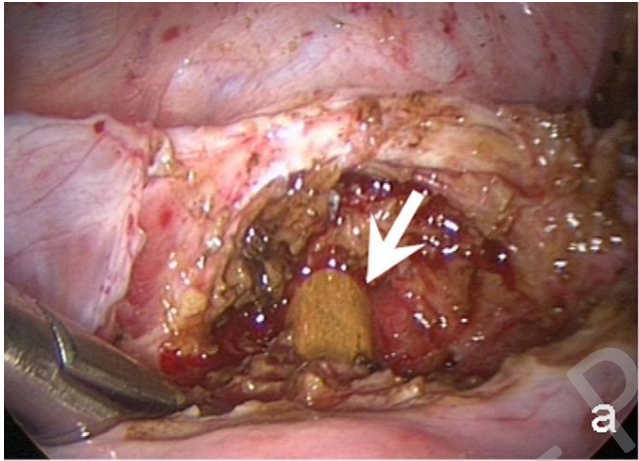




CGMMP - Pr AGOSTINI







Coelioscopie

Review of literature in laparoscopically managed cesarean scar defects

Author	Date and journal	No of patients	Presenting symptoms	Diagnostic tool	Surgical approach	Operation time (min)	Surgical instrument to excise defect	How to close	HS after repair	Peritoneal closure over the defect	Peri-/postoperative complications
Klemm et al	2005 J Perinat Med	3	(3/3): PP and AUB	USG	LS used to excise the scar; defect repaired vaginally	117	NR	3-4 separate mono layer with polydioxanone 0	No	Yes, used material NR	No
Donnez et al	2008 Fertil Steril	3	(3/3): PP, AUB, and IF	USG MRI HG HS	LS	NR	CO ₂ laser	4 separate mono layer with polyglactin 910 2/0	Yes	Yes, used material NR	No
Yalcinkaya et al	2011 J Reprod Med	2	(1/1): PP and IF (1/1): PP, AUB, and IF	USG	Robotic excision	240	Hook electrode	Double layer with polyglactin 910 2/0 and 3/0	No	Yes, used material NR	No
Marotta et al	2013 J Minim Invasive Gynecol	13 (10 new)	(4/10): asymptomatic (3/10): AUB (2/10): dysmenorrhea (1/10): PP, AUB, dysmenorrhea, dyspareunia	USG MRI	LS	NR	CO ₂ laser	3 separate double layer with polyglactin 910 2/0	Yes	Yes, polyglecaprone 25	No
Li et al	2014 J Perinat Med	41 (17 treated by LS)	(11/17): AUB (2/17): AUB and IF (2/17): PP and AUB (1/17): PP (1/17): IF	USG HS	LS	65 ± 26	Ultrasound knife	Mono-layer with polyglactin 910 1/0	Yes	Yes, used material NR	No
Api et al (our case)	2014	1	(1/1): AUB, recurrent pregnancy loss	USG HS	LS	42	Monopolar cautery	Continuous double layer with polyglyconate 3/0 barbed suture	No	Yes, polyglycaprone 25	No

AUB = abnormal uterine bleeding; IF = infertility; HG = hystero-graphy; HS = hysteroscopy; LS = laparoscopy; MRI = magnetic resonance imaging; NR = not reported; PP = pelvic pain; USG = ultrasonography.

Coelioscopie

Review of literature in the outcomes of laparoscopically managed cesarean scar defects

Author	Follow-up and outcome	Postoperative recommendations	Residual myometrium covering defect before surgery	Myometrial thickness after surgery
Klemm et al	30 mo (median) (3/3): free of symptom	Avoid pregnancy for 6 mo	NR	NR
Donnez et al	3 mo with MRI and USG (3/3): free of symptoms (1/3): got pregnant	Using OC for 3 mo	USG: (2/3): <1 mm (1/3): 2.1 mm	USG: 11 mm 9.4 mm 10.1 mm
Yalcinkaya et al	3 and 11 mo (2/2): normal menstruation resumed and got pregnant	Using OC for 2 mo	USG: 1.2 mm 1.4 mm	USG: 2.5 mm 2.6 mm
Marotta et al	3 mo to 4 yr (6/10): free of symptom (4/10): got pregnant	Avoid pregnancy for 3 mo	USG: 1.6 ± 1.04 mm 1.7±0.69 mm	MRI: 9.8 ± 1.04 mm
Li et al	3–16 mo. (12/17): free of symptoms (4/17): got pregnant	Use contraception for 6 mo	USG: <2.5 mm	USG: >3 mm
Api et al (our case)	3 mo (1/1): free of symptoms	No recommendation	USG: 1.5 mm	USG: 13.1 mm

AUB = abnormal uterine bleeding; MRI = magnetic resonance imaging; NR = not reported; OC = oral contraceptive; USG = ultrasonography.

Coelioscopie

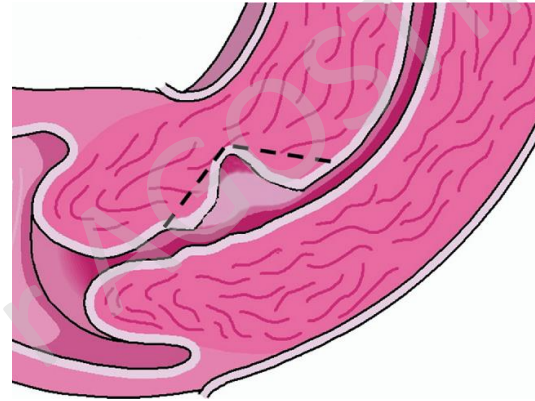
Résultats

- 36 cas de traitement coelioscopique
(5 articles)
- 6/8 Traitement d'une infertilité secondaire
- 31/32 disparition des symptômes
(saignements anormaux et douleurs)

Traitement chirurgical

Hystérocopie

Correction du défaut
Pas de consolidation du myomètre

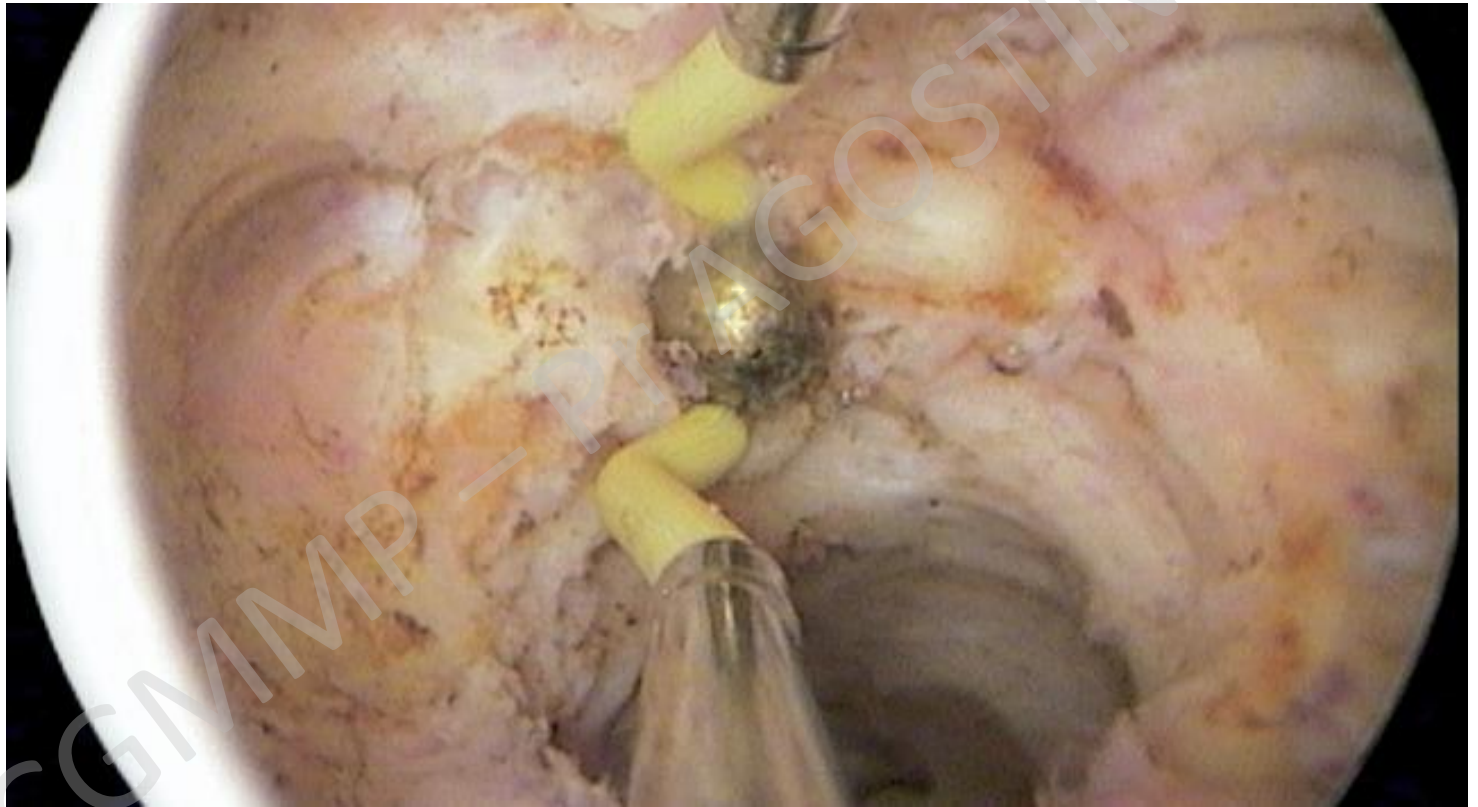


Traitement hystéroscopique



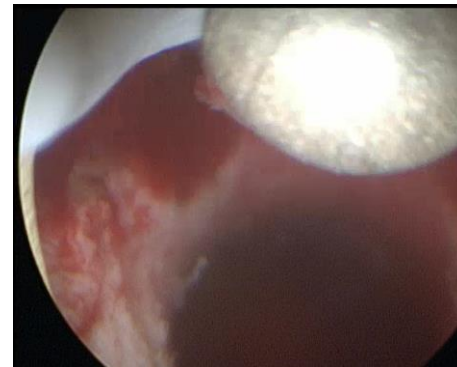
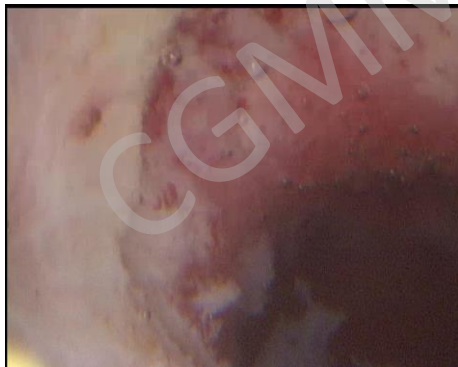
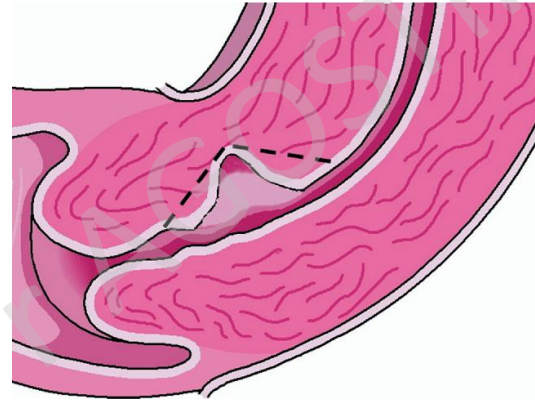
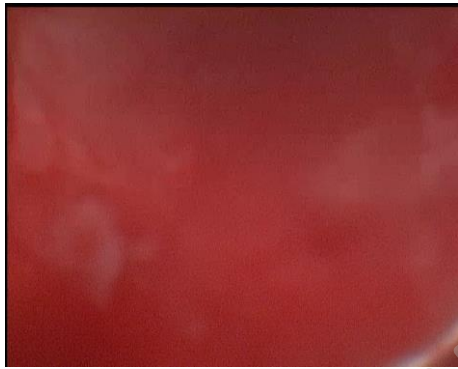
Gubbini et al. JMIG 2008

Traitement hystéroscopique



Gubbini et al. JMIG 2008

Traitement hystéroscopique



Hystéroscopie

Résultats

Clinical characteristics of the study population

Variable	Value
Age, years	39.2 (4.5; 29–52)
Postmenstrual abnormal uterine bleeding	118 (98%)
Suprapubic pelvic pain	16 (13)
Site of isthmocele	
Superior middle	116 (97)
Inferior	4 (3)
Uterus position	
Antiflexion	36 (30)
Retroflexion	84 (70)
Number of previous caesarean section	
1	81 pts
>1	39 pts
Repair of uterine incision	
Single layer	120 (100)
Double layer	0
Duration of surgery, min*	8 (2.1; 7–8.6)
Follow-up (months)	35 (21; 1–72)

Raimondo et al. JMIG 2015

Hystéroscopie

Résultats

Disparition des symptômes: 96 (80%) patientes

Amélioration: 8 (7%) patientes

Pas de modification: 16 (13%) patientes

Hystéroscopie

Fertilité

- 41 patientes avec une infertilité secondaire durant entre 3 et 8 ans sans autre cause associée
- Traitement hystéroscopique
- 37 patientes avec grossesse à terme 1 à 2 ans après le traitement

Choix thérapeutique

Coelioscopie

Durée longue

Risque élevé

Augmentation

de l'épaisseur du myomètre

Hystéroscopie

Durée réduite

Risque faible

Pas de modification de l'épaisseur
du myomètre

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Choix thérapeutique

Coelioscopie

Durée longue

Risque élevé

Augmentation

de l'épaisseur du myomètre

Antécédent de grossesse
sur cicatrice de césarienne

Hystéroscopie

Durée réduite

Risque faible

Pas de modification de l'épaisseur
du myomètre

Pas de désir de grossesse

Fertilité ?