Le syndrome d'Asherman
Un challenge chirurgical

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Strasbourg - France

Définition

Adhérences intra-utérines secondaires à un traumatisme

J. G. Asherman

Amenorrhoea traumatica (atretica). Journal of Obstetrics and Gynecology of the British Empire, 1948, 23-30

Traumatic intrauterine adhesions. Journal of Obstetrics and Gynecology of the British Empire, 1950, 57: 892-896

Description par Ernst Wertheim (1864-1920), Otto Ernst Küstner (1849-1931), Heinrich Fritsch in 1894, Gustav von Veit (1824-1903), Josef Halban (1870-1937), Bass 1927, Stamer

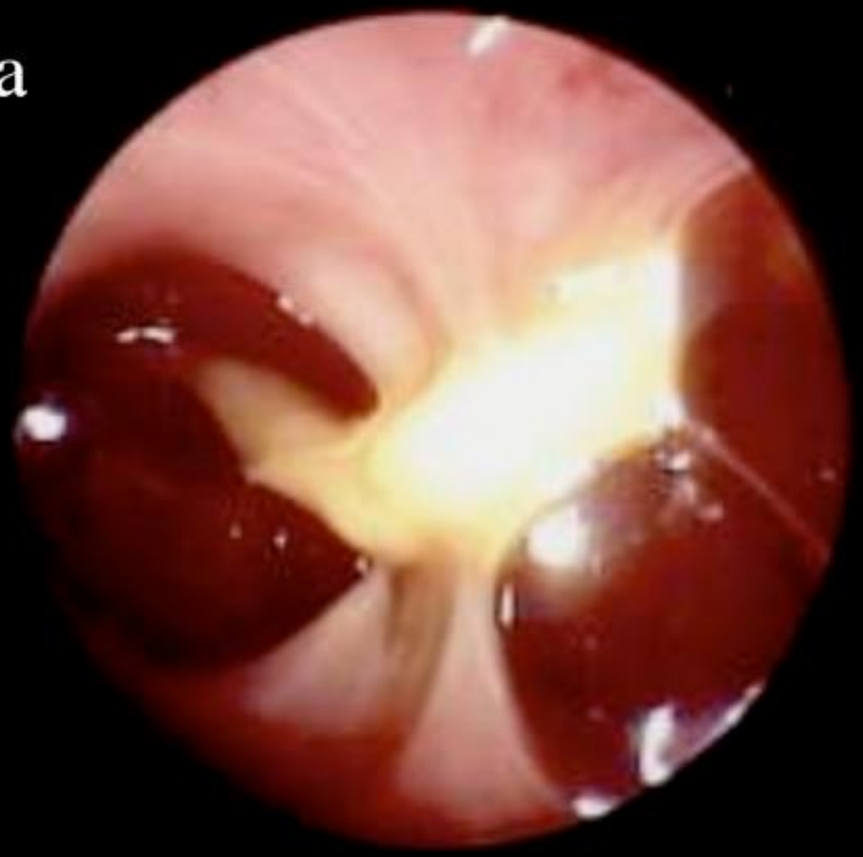
Un challenge ?

- Pathologie iatrogène
- Diagnostic souvent retardé
- Traitement difficile
- Parfois itératif
- Risque de complication
- Taux d’échec élevé
- Surtout quand les repères habituels non visibles

Toutes les synéchies ne sont pas identiques

- Consistence
- Localisation
- Extension
- Etiologie
- Clinique
- Pronostic

a



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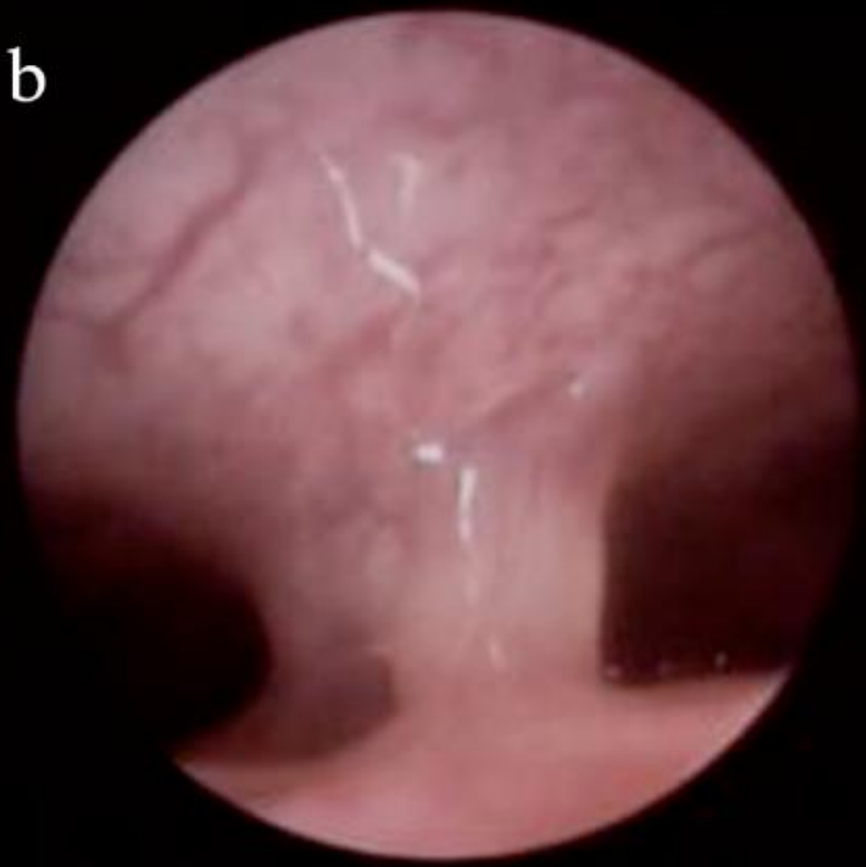

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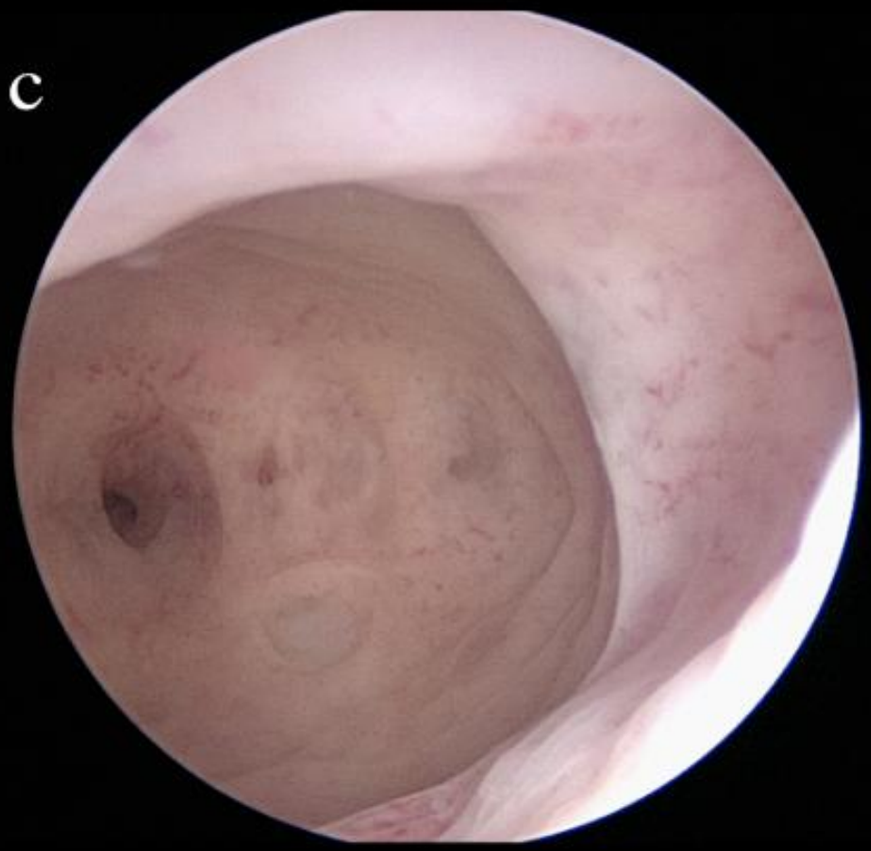

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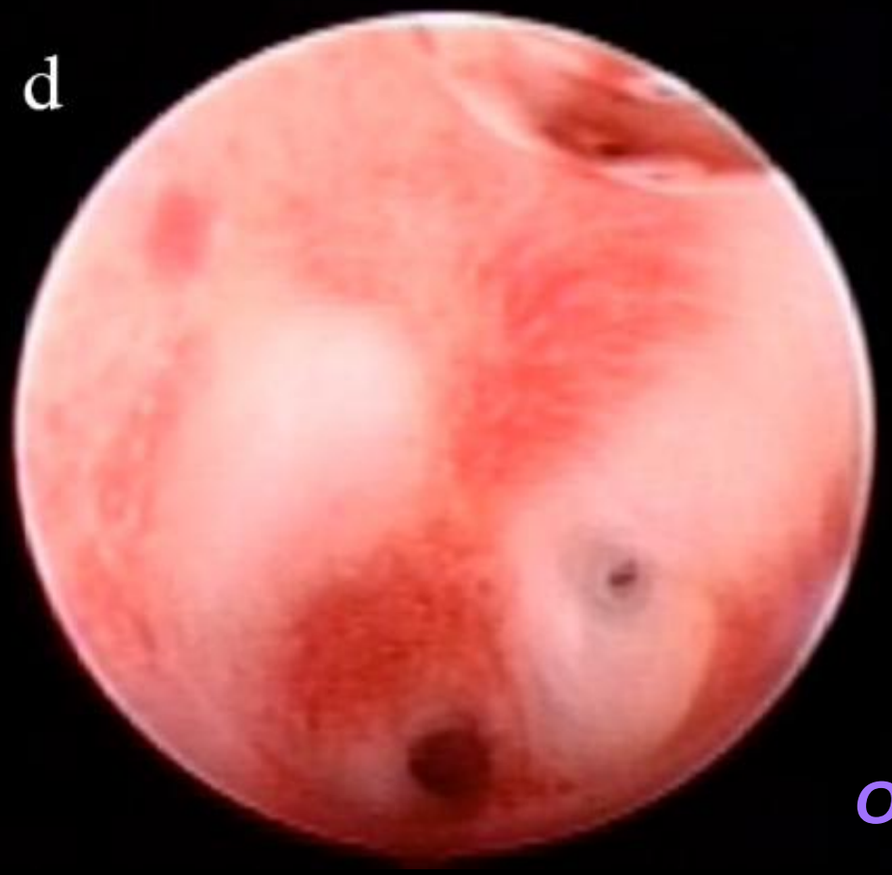

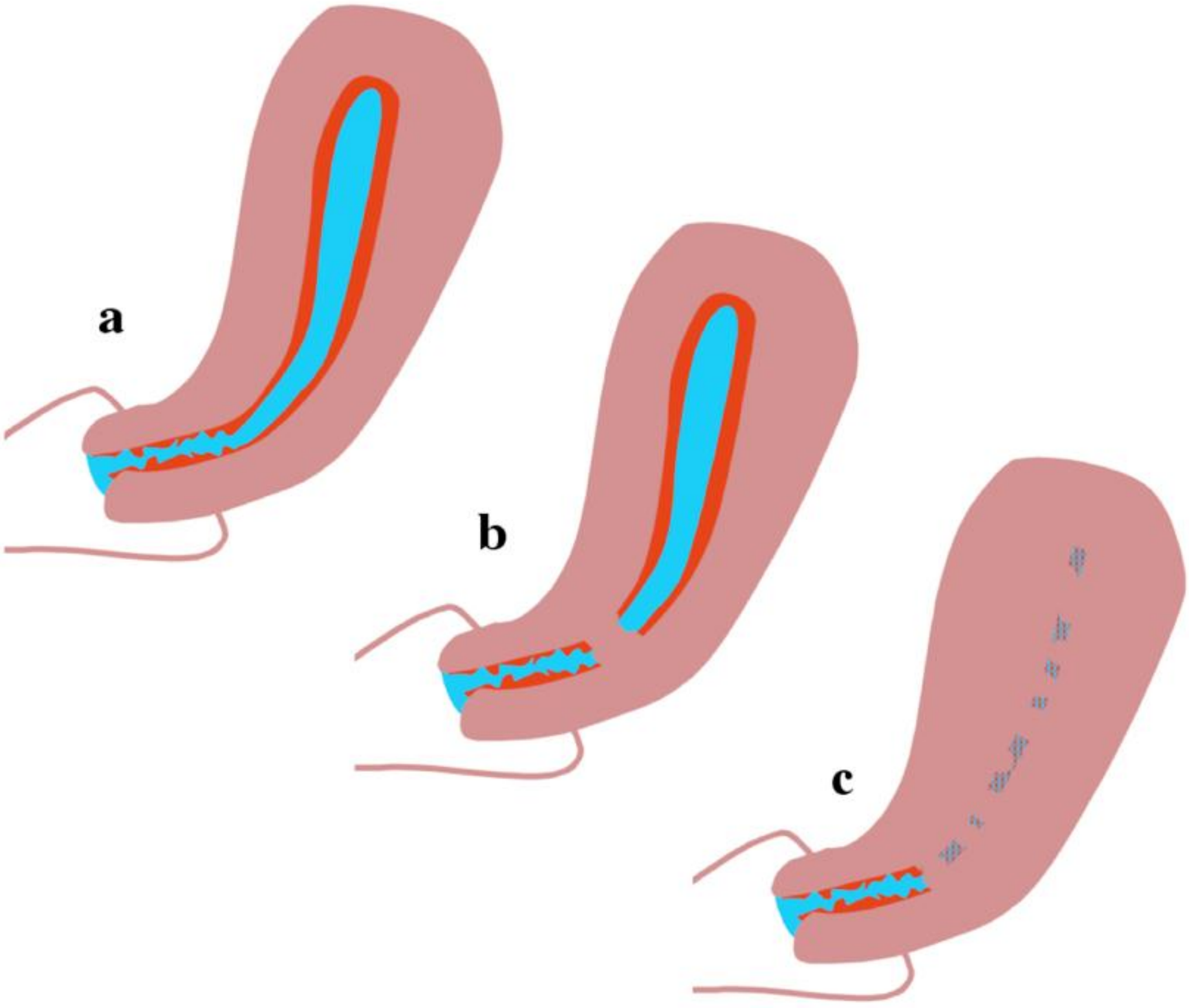

Les étiologies évoluent

- curetage
- chirurgie utérine : myomectomie, résection de fibrome
- nouvellesétiologies
  - embolisation
  - traitement chirurgicalconservateur des hémorragies de ladélivrance
- toujours penser au BK (tuberculose)

Table 1 Occurrence of intrauterine adhesions following surgery for various conditions and in those with various symptoms.

Condition/procedure	*Prevalence (%)*	*Reference*
Secondary amenorrhoea	1.7	Jones (1964)
Infertility	6.9	Nawroth et al. (2003)
Post-Caesarean section	2.8	Rochet et al. (1979)
Post-partum D and C (any time)	3.7	Bergman (1961)
Post-partum D and C (2–4 weeks)	23.4	Eriksen and Kaestel (1960)
Early spontaneous abortion D and C	6.4	Adoni et al. (1982)
Late spontaneous abortion D and C	30.9	Adoni et al. (1982)
Missed abortion	35	Schenker and Margalioth (1982)
Elective abortion D and C	13	Kralj and Lavric (1974)
Recurrent abortion	39	Toaff and Ballas (1978)
Retained products of conception	40	Westendorp et al. (1998)
Spontaneous abortion		
One	16.3	Friedler et al. (1993)
Two	14	
Three or more	32	
Hysteroscopic myomectomy		
Single	31.3	Taskin et al. (2000)
Multiple	45.5	
Hysteroscopic metroplasty	6.7	

D and C = dilation and curettage.

C M March, Reproductive BioMedicine Online (2011) 23, 63– 76

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J. Obstet. Gynaecol. Res. Vol. 38, No. 5: 823–831, May 2012

Hysteroscopy after uterine fibroid embolization: Evaluation of intrauterine findings in 127 patients

Michal Mara[1], Petr Horak[1], Kristyna Kubinova[1], Pavel Dundr[2], Tomas Belsan[3] and David Kuzel[1]

Material and Methods: Premenopausal patients after bilateral UAE for symptomatic intramural fibroid underwent subsequent hysteroscopic examination 3–9 months following UAE. The uterine cavity was examined with focus on specific post-embolization changes. Biopsy of endometrium was obtained and evaluated together with a biopsy of abnormal foci if present.

Results: UAE was performed in a total of 127 women with an average size of dominant fibroid 63.1 mm in diameter and an average patient age of 35.1 years. Even though the majority of patients were asymptomatic at the time of hysteroscopy (78.0%), the post-embolization hysteroscopic examination was normal in only 51 patients (40.2%). The most frequent abnormalities included tissue necrosis (52 women, 40.9%), intracavitary myoma protrusion (45 women, 35.4%), endometrium 'spots' (22.1%), intrauterine synechiae (10.2%) and 'fistula' between the uterine cavity and intramural fibroid (6.3%). Histopathological examination showed normal, secretory or proliferative endometrium in 83.5% patients. Necrosis and/or hyalinization prevailed in the results of biopsy of abnormal loci (45 cases, 35.4%).

Table 5. Synechiae and pregnancy rate after uterine compression sutures

Report	Year	*n*	HSC or HSG	Synechiae	Pregnancy
Cho *et al.*[5]	2000	23	26% (6/23)	0 (0/6)	4
Chen *et al.*[27]	2002	1	100% (1/1)	0 (0/1)	
Ochoa *et al.*[28]	2002	1	100% (1/1)	100% (1/1)	
Tjalma and Jacquemyn[29]	2004	1	0		
Cotzias and Girling[31]	2005	2	0		
Hwu *et al.*[30]	2005	14	14% (2/14)	0 (0/2)	2
Pereira *et al.*[9]	2005	7	0		1
Wu and Yeh[7]	2005	1	100% (1/1)	100% (1/1)	
Baskett[22]	2007	2	0		
Ouahba *et al.*[8]	2007	20	30% (6/20)	0 (0/6)	6
Desbriere *et al.*[32]	2008	20	68% (13/19)	23% (3/13)	
Hackethal *et al.*[6]	2008	7	14% (1/7)	0 (0/1)	
Gottlieb *et al.*[33]	2008	2	0		
Chen and Wang[36]	2009	1	0		
Gungor *et al.*[34]	2009	16	0		
Reyftmann *et al.*[35]	2009	1	100% (1/1)	100% (1/1)	
Total		**119**	**32**	**18% (6/32)**	**13**

HSC, hysteroscopy; HSG, hysterosalpingogram.

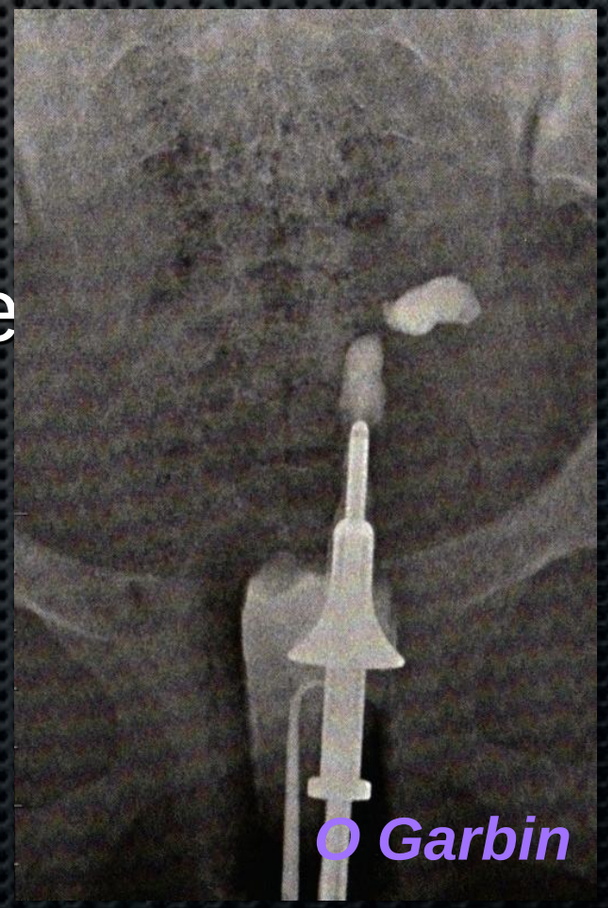
Poujade O, Grossetti A, Mougel L, Ceccaldi P, Ducarme G, Luton D. Risk of synechiae following uterine compression sutures in the management of major postpartum haemorrhage. BJOG 2011;118:433–439

Vidéo 1

Vidéo 2

Penser à la tuberculose

- Pas d'antécédent
- Patiente migrante
- Aspects évocateurs à l'hystérographie
  - Cavité en treffle
  - Ca++
  - Obstruction médio-tubaire en massue
- Intérêt interféron gamma



Vidéo 3

Synéchies

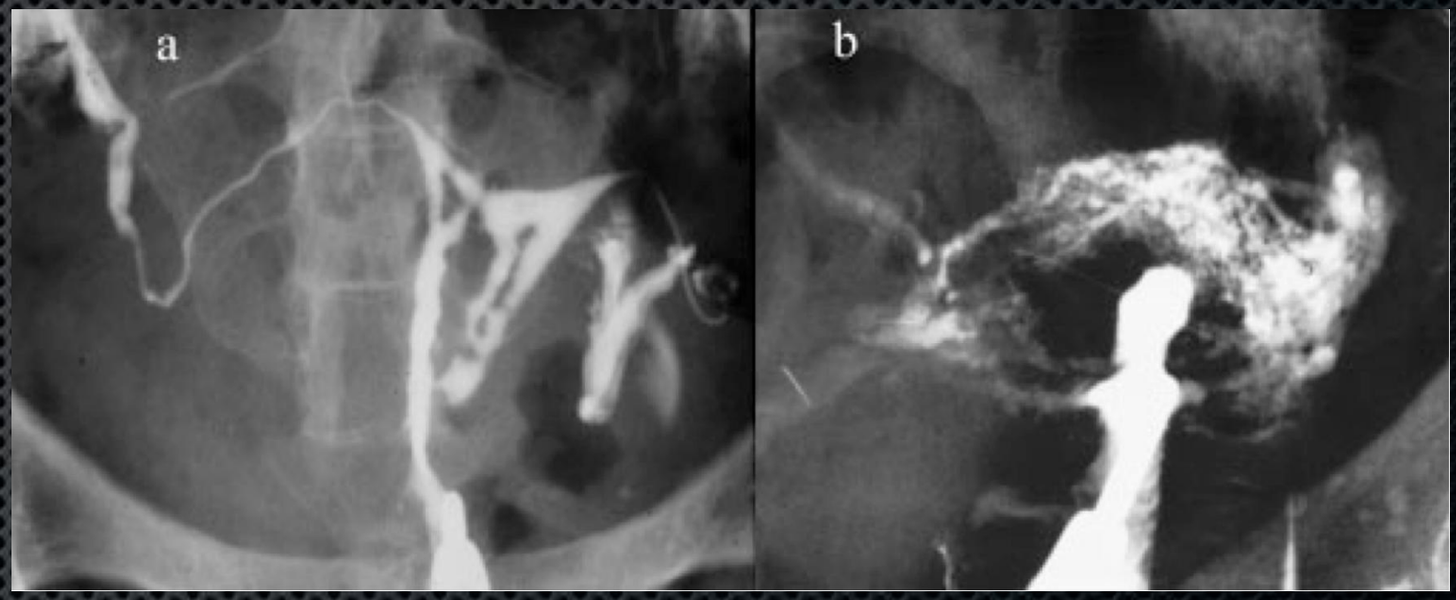
- Secondaires
  - à des gestes aveugles
  - à des gestes traumatiques et/ou iatrogènes

- Nécessité
  - d’un bon bilan préopératoire
  - d’une bonne vision
  - de ne pas être traumatique

Bilan pré-opératoire

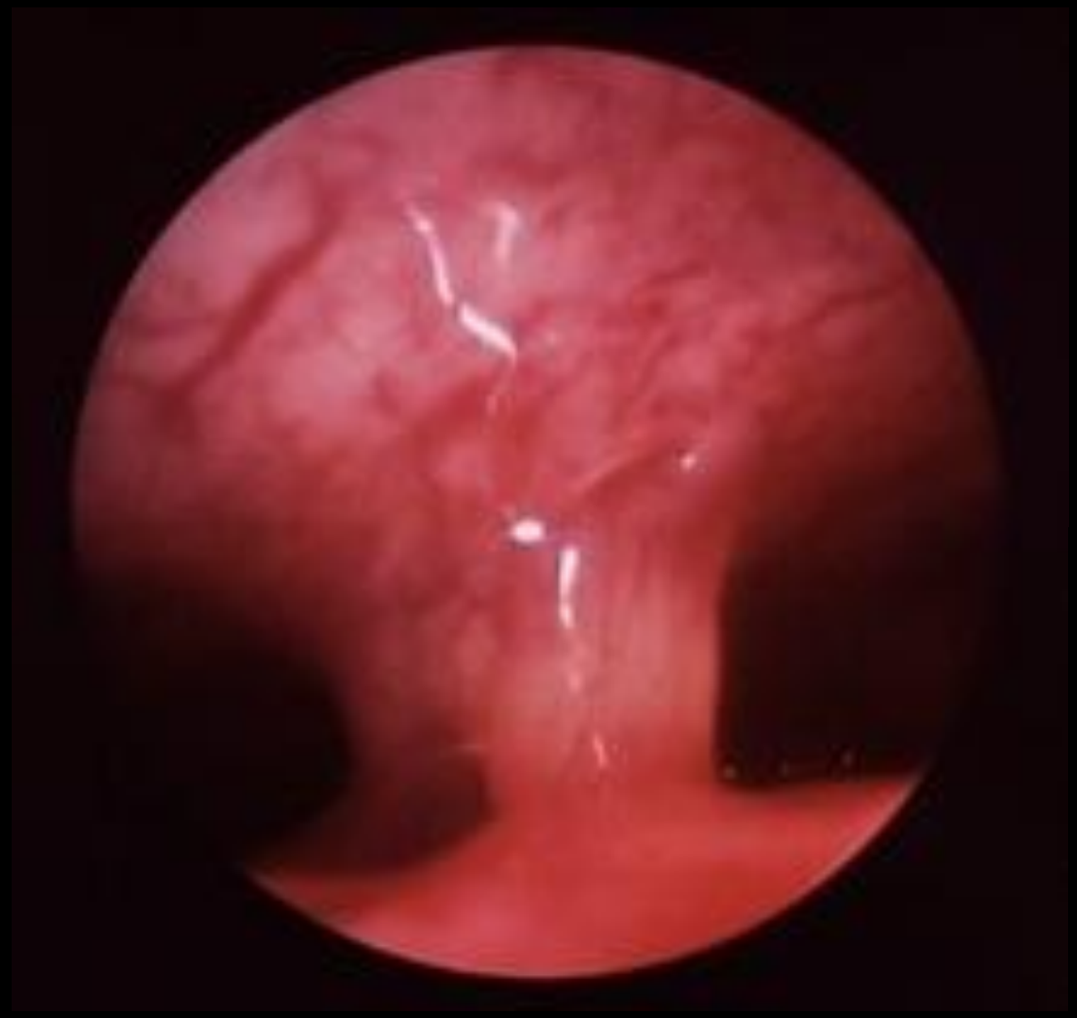
- Hystérographie+++

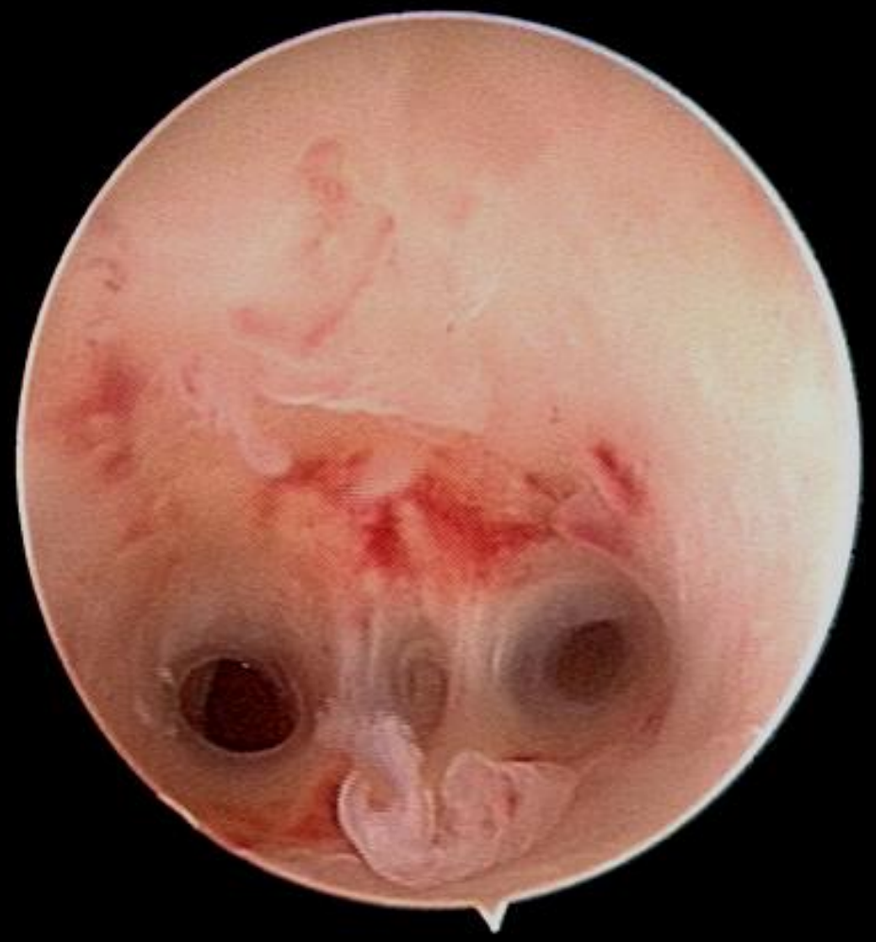
- Hysteroscopie +

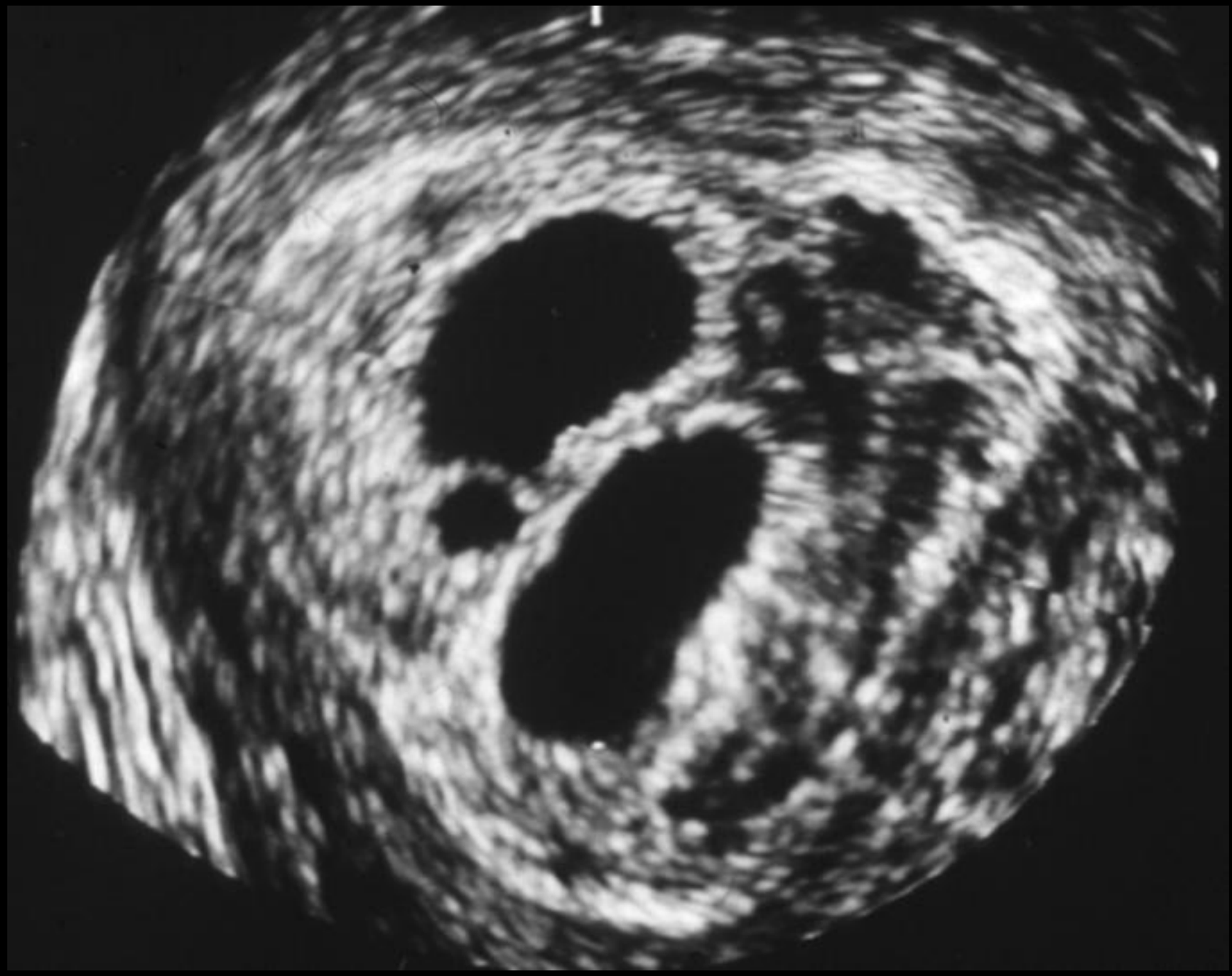


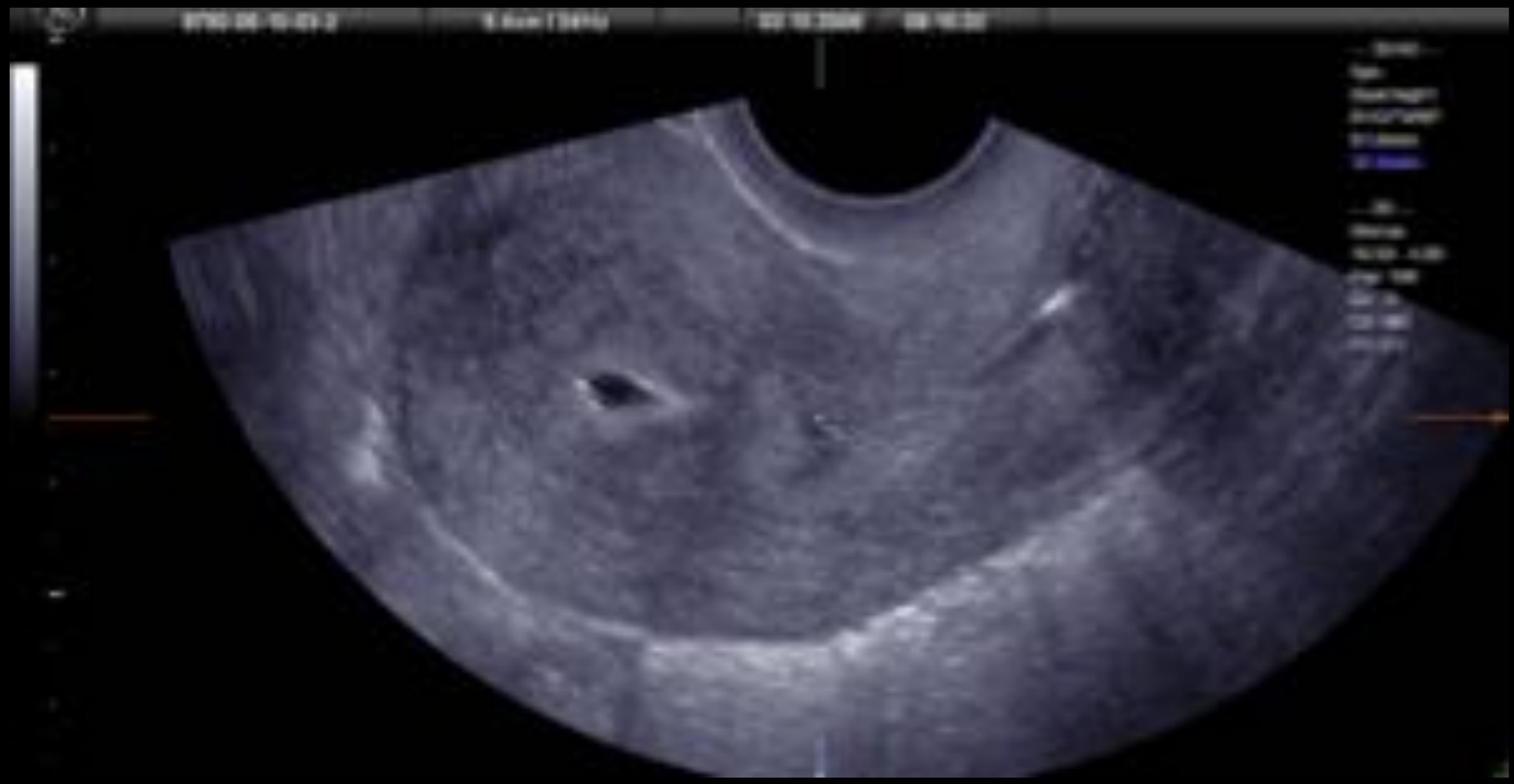
Bilan pré-opératoire

- Quand les repères ne sont pas visibles
  - Echographie +++
  - IRM +

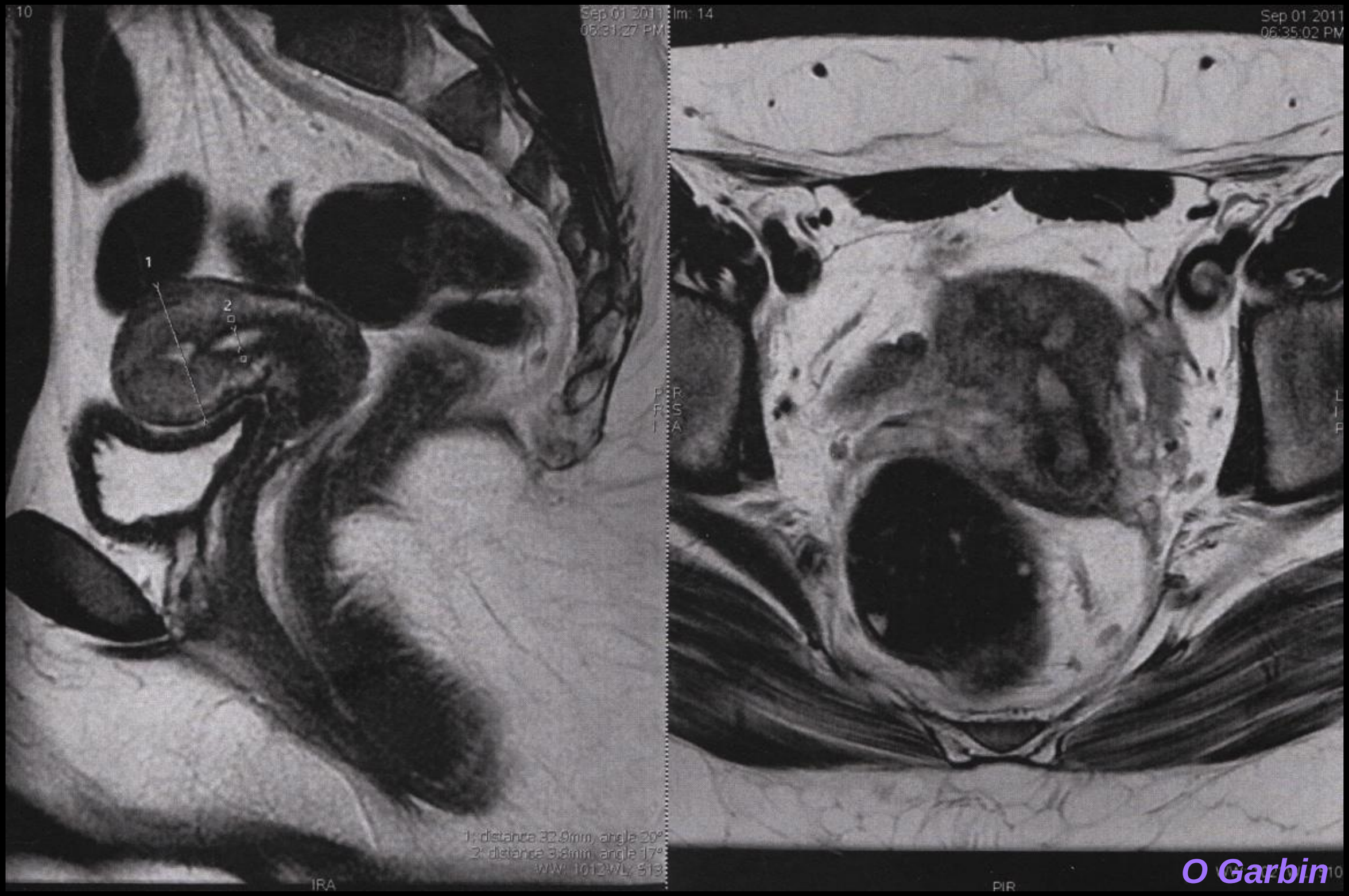








D Levailland, Kremlin-Bicètre, France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O Garbin

Classification AFS

Score	1	2	4
%	< 1/3	1/3-2/3	>2/3
Type	Mince	Mince et dense	Dense
Règles	Normales	Oligorrhée	Aménorrhée

S’applique à l’hystéroscopie et à l’hystérographie
Stade I : score de 1 à 4 ; Stade II : score de 5 à 8 ; Stade III : score de 9 à 12.

Classification européenne des synéchies intra-utérines
ESGE

GradeEtendue des adhérences intra-utérines

IAdhérences fines: facilement levées par l'extrémité de l'hystéroscope, région cornuale normale

IIAdhésion dense unique: connectant différentes régions de la cavité utérine, possible visualisation des 2 ostiatubaires, ne pouvant pas être levée par l'extrémité de l'hystéroscope seul

IIaAdhérence oblitérant seulement la région de l'orifice cervical interne: partie haute de la cavité utérine normale

IIIAdhérences denses et multiples: connectant différentes régions de la cavité utérine, oblitération unilatérale de la région ostiale tubaire

IVAdhérences denses et étendues avec oblitération (partielle) de la cavité utérine: oblitération bilatérale (partielle) de la région ostiale tubaire

IVaCicatrice et fibrose endométriale étendue combinée à des adhérences de grade I ou II: avec aménorrhée ou hypoménorrhée marquée

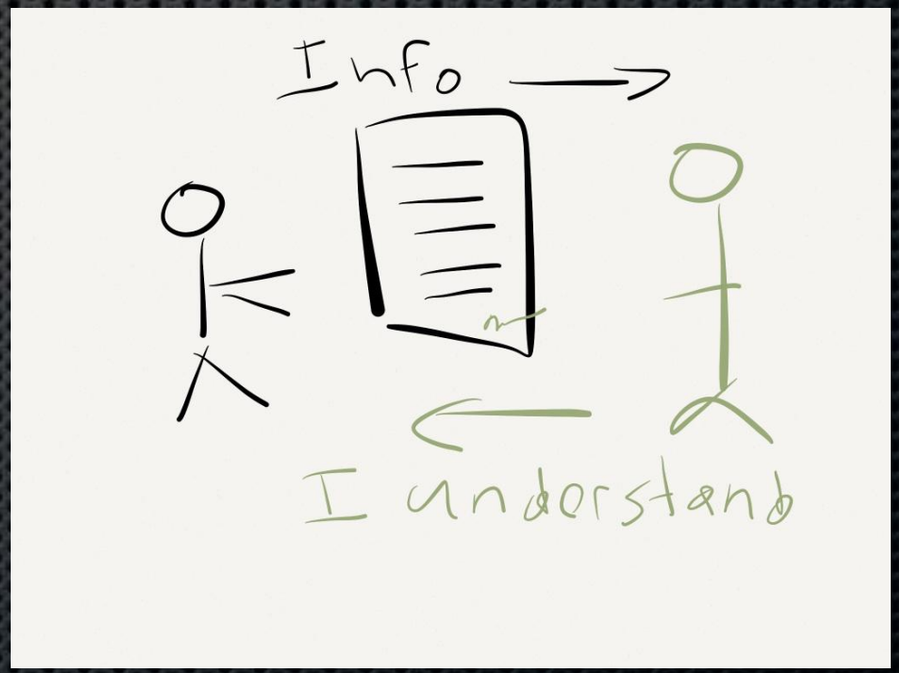
IVbCicatrice et fibrose endométriale étendue combinée à des adhérences de grade III ou IV: avec aménorrhée

Au terme du bilan

- Synéchies simples
- Synéchies complexes
- Cas désespérés

Bonne information

- Pronostic
- Risques
  - échecs
  - complications(perforation ++)
  - récidive avec procédures itératives
  - nécessité d’un contrôle post-opératoire
- Risques obstétricaux



Bien voir

- La meilleure vision est celle de l’hystéroscope
- Prise en défaut si repères non visibles (ostia +++)
- Dans ce cas
  - intérêt d’un guidage échographie +++
  - intérêt de l’hystérographie peropératoire +
  - pas d’intérêt pour la coelioscopie

Ultrasound Obstet Gynecol 2012; **39**: 715–718
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Ultrasound is the optimal choice for guidance in difficult hysteroscopy

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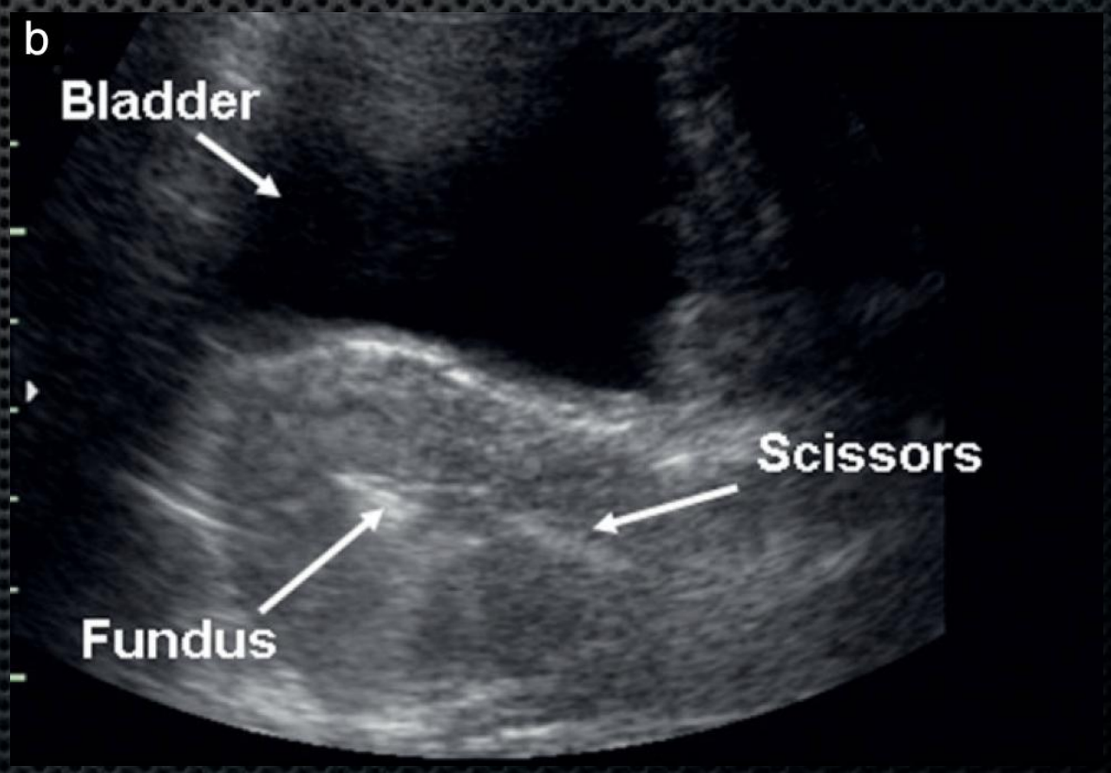
Division of Reproductive Endocrinology & Infertility, Department of Obstetrics & Gynecology, University of Iowa Carver College of Medicine, Iowa City, IA, USA

Methods *This was a retrospective cohort study. Charts of all patients undergoing reparative surgery for intrauterine synechiae or uterine septa at our academic institution between 2000 and 2008 were reviewed. A total of 159 procedures were included in the study, categorized into concurrent laparoscopic guidance (n = 69), ultrasound guidance (n = 52) or no guidance (n = 38). Data regarding billing, surgical case logs and complications were collected for these procedures. Using these data, complication rates and inflation-adjusted charges were compared between the groups. Statistical analysis was performed using Fisher's exact test and Student's t-test, as appropriate.*

Results *A uterine perforation rate of 8.7% was observed with laparoscopic guidance vs 1.9% with ultrasound guidance (P = 0.12) and 5.3% with no guidance (P = 0.41). Analysis of billing data showed that average total costs were significantly less for ultrasound guidance than for laparoscopic guidance ($9124 vs $11 895, P < 0.001). Ultrasound guidance did not increase costs over hysteroscopy alone ($9124 vs $8242, P = 0.54).*



Vidéo 4

Ne pas être traumatique

- Respecter
  - Le col — ne pas dilater
  - L'endomètre résiduel — ne pas réséquer, utiliser la bonne énergie
  - Lemyomètre — ne pas réséquer
- Se servir
  - du bon instrument
  - de la bonne énergie

Utiliser les bons hystéroscopes

- les plus petits possibles
- éviterla dilatation
- bonne image
- « See and treat »

Vidéo 5

Utiliser la bonne énergie

- Mécanique +++

évite le blanchiment des tissus +++

- Electrique
  - ~~Monopolaire~~
  - Bipolaire

- Laser

Vidéo 6

Reconnaitre quand on fait fausse-route

- Modification de la texture des tissus
- Analyse de la vascularisation, saignements

- Intérêt
  - de l’échoguidage
  - de l’hystérographie

Vidéo 7

Vidéo 8

Récidives fréquentes

Total adhesions treated by hysteroscopy: must we stop at two procedures?

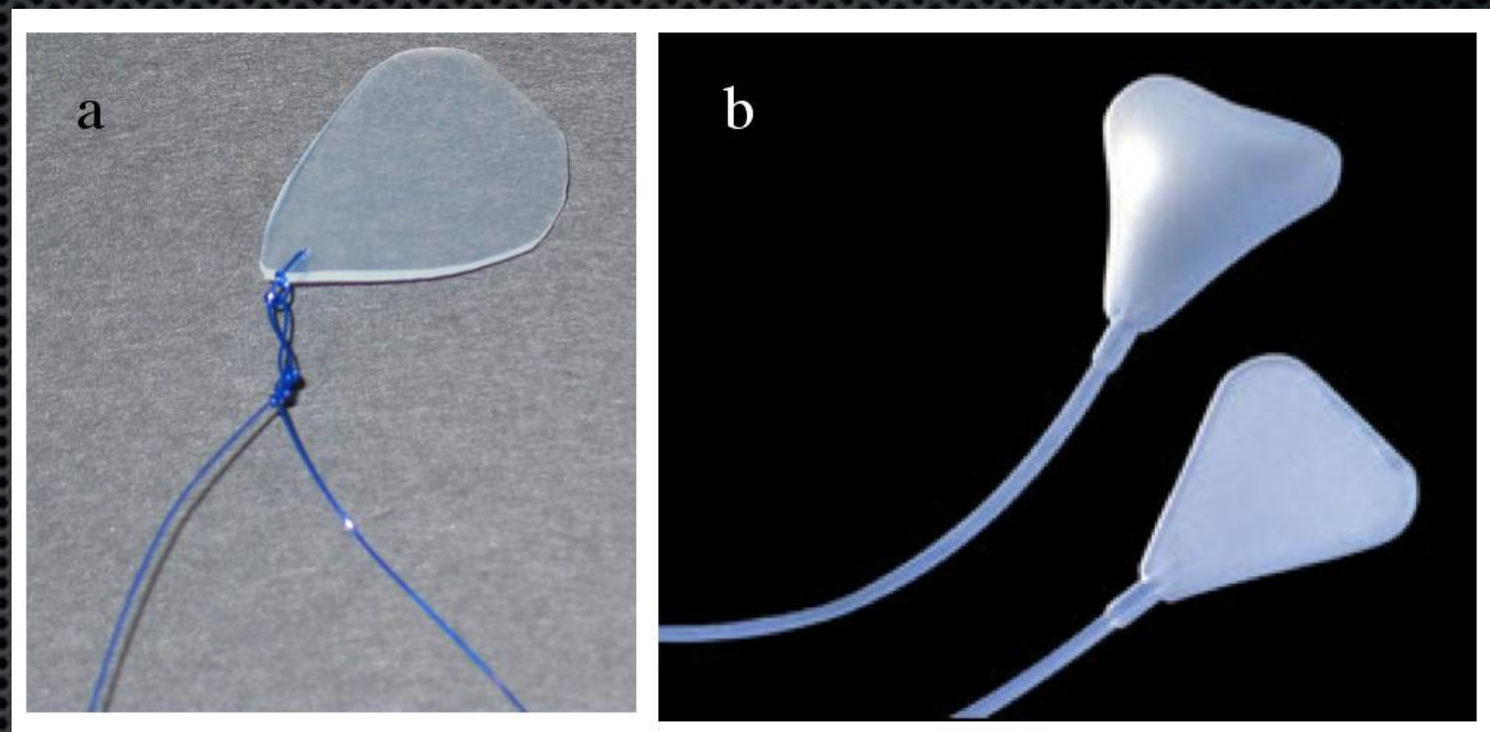
Hervé Fernandez, M.D., Ph.D.,[a,b,c] Sarah Peyrelevade, M.D.,[d] Guillaume Legendre, M.D.,[a] Erika Faivre, M.D.,[d] Xavier Deffieux, M.D., Ph.D.,[d] and André Nazac, M.D.[a]

Patient(s): Twenty-three women who had Asherman syndrome and required more than two hysteroscopic operative procedures.
Intervention(s): Third or higher-order operative hysteroscopy procedure.
Mean Outcome Measure(s): Fertility rate.
Result(s): The women's mean age was 34 years (±5.8 years) when treatment for adhesions began. All women initially had adhesions classified as severe with total amenorrhea. Twelve patients had three separate procedures to treat the adhesions, nine had four treatments, and two had five treatments. One woman was lost to follow-up. At the conclusion of treatment, more than 80% of the women had either no adhesions at all or only mild adhesions. The overall pregnancy rate was 40.9%; there were nine pregnancies and six term infants (27.2%). All but one of these pregnancies were spontaneous. The mean time to pregnancy was 10.5 months (±4.7 months).

Fertil Steril, 2012

Comment prévenir les récidives ?

- œstrogènes ?
- DIU ?
- acide hyaluronique ?
- autres..?
- contrôle post opératoire +++



Vidéo9

	Bon pronostic	Mauvais pronostic
Localisation	**Marginale, centrale, isthmique**	**Fundique, cornuale**
Etendue	**Peu étendue**	**Totale**
Aspect	**Vélamenteuse, muqueuse**	**Fibreuse**
Etiologie		**Tuberculeuse**
Ancienneté	**Récente**	**> 1 an**

Reproductive outcome of hysteroscopic adhesiolysis for Asherman syndrome.

Study	Publication year	Characteristics of patients	All cases: Number	Conception	Spontaneous pregnancy loss rate	Live birth rate[a]	Premature delivery	Abnormal placenta[b]	Severe cases: Number
Sugimoto (136)	1978	–	–	79	29/29 (36.7%)	45/79 (57.0%)	–	10	–
Fedele et al. (84)	1986	–	–	22	10/22 (45%)	9/22 (40.7%)	–	–	–
Friedman et al.(82)	1986	–	–	24	1/24 (4.2%)	23/24 (95.8%)	–	2	
Valle and Sciarra (32)	1988	Infertility	81	48 (59.2%)	17/48 (35.4%)	29/48 (60.4%)	–	1	30
		Pregnancy loss	106	95 (89.6%)	9/95 (9.5%)	85/95 (89.5%)	–		17
Parent et al. (139)	1988	Wishing to have a child	169	107 (63.3%)	–	91/107 (85.0%)	–	–	73
Pistofidis et al. (105)	1996	Infertility	86[d]	30 (34.9%)	–	21[c]/30 (70%)	–	–	11
Roge et al. (87)	1997	Wishing to have a child	50	28 (56%)	10/28 (35.7%)	24/28 (85.7%)	–	–	–
Pabuccu et al. (89)	1997	Infertility	16	10 (62%)	–	6/10 (60%)	–	–	4
		Recurrent (≥3) miscarriage	24	24 (100%)	–	17/24 (70.8%)	–	–	–
McComb and Wagner (101)	1997	–	–	–	1/6 (16.7%)	5/6 (83.3%)	2/5 (40%)	2	–
Protopapas et al. (102)	1998	–	–	–	1/4 (25%)	2/4 (50%)	1/2 (50%)	–	–
Feng et al. (85)	1999	Wishing to have a child	166	156 (83.9%)	11/156 (7.1%)	145/156 (92.9%)	–	4	–
Capella-Allouc et al. (103)	1999	Wishing to have a child	–	–	5/15 (33.3%)	9/15 (60%)	4/9 (44.4%)	2	28
Preutthipan and Linasmita (90)	2000	Infertility	45	16 (35.6%)	–	16/16 (100%)	–	–	10
		Pregnancy loss	5[d]	2 (40%)	–	2/2 (100%)	–	–	–
Zikopoulos et al. (91)	2004	–	–	–	–	–	10/20 (50%)	–	–
Total				468/632 (74%)[e]		529/666 (79.4%)[f]			

[a] Live birth rate is defined live birth/pregnancy achieved.
[b] Defined as placenta accrete, placenta increta, placenta praevia, retained placenta, and uterine sacculation over the placenta site.
[c] Number of patients delivering a live birth or having a continuing pregnancy.
[d] All patients received in vitro fertilization.
[e] Refers to the total of series for whom the number of cases was reported.
[f] Refers to the total of series for whom the number of conceptions was reported.

Yu, FertilSteril, 2008

Conclusion

- Peut-être la plus difficile des hystéroscopies opératoires

- Dans les cas difficiles
  - bilan préopératoire soigneux
  - information ++
  - utiliser les bons outils et la bonne énergie
  - intérêt échoguidage