15ème Congrès International DE GYNÉCOLOGIE OBSTÉTRIQUE & REPRODUCTION de la Côte d'Azur

CENTRE HOSPITALIER Princesse Grace
PRINCIPAUTÉ DE MONACO

DISPOSITIF INTRA-UTERIN EN 2017

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Utilisation du DIU en France

Mode de contraception choisi dans 22% des cas

Table 1
Sociodemographic and reproductive factors associated with women's current use of IUDs among those in need of contraception

		%	% IUD use	p	Adjusted OR	95% CI	p
Age *	<25	21.2%	0.9%	<.001	1		<.001
	25–29	13.3%	9.1%		5.9	2.3–14.8	
	30–34	15.0%	19.9%		8.1	3.2–20.4	
	35–39	17.7%	31.3%		10.6	4.1–26.9	
	40+	32.9%	34.9%		12.0	4.8–30.4	
Current partner	No partner	10.0%	11.0%				
	Non cohabitating partner	18.0%	6.8%	<.001			
	Cohabitating partner	72.0%	26.5%				
Highest diploma	<High school	42.0%	23.6%	.0002			
	High school	22.0%	16.6%				
	Some college	19.0%	24.6%				
	Graduate school	17.0%	18.5%				
Financial situation	No problem	30.0%	20.7%	.28			
	Tight	50.0%	22.5%				
	Very difficult	20.0%	19.5%				
Professional situation	Works/on leave	70.0%	25.9%	<.001			
	Student	14.0%	1.0%				
	Unemployed	8.0%	16.1%				
	Other	8.0%	23.8%				
Health insurance	Social security alone	5.0%	16.4%	.19			
	Social security and private insurance	88.1%	22.0%				
	Universal health plan (government plan for low income)	6.1%	17.4%				
	Unknown	1.0%	11.1%				
Country of births	Mainland France	88.0%	21.1%	.71			
	French overseas territories	1.0%	24.8%				
	Foreign country	11.0%	22.9%				
Prior births *	0	36.0%	3.0%	<.001	1		<.001
	1	16.0%	17.7%		2.7	1.6–4.4	
	2 or more	48.0%	36.3%		5.0	3.1–8.3	
Prior unintended pregnancy	No	66.0%	18.0%	<.001			
	Yes	34.0%	27.9%				
Future pregnancy intentions	None	56.0%	33.5%	<.001	1		<.001
	>2 years	28.0%	5.2%		0.7	0.5–1.1	
	within 2 years	15.0%	6.6%		0.4	0.2–0.5	
BMI	<30	94.0%	21.3%	.16			
	>=30	6.0%	26.3%				
History of STI	No	92.0%	21.3%	.68			
	Yes	8.0%	22.4%				
Prior gynecological problems (breast, uterus, cervix, fallopian tubes or ovaries)	No	88.9%	21.1%	.8	1		.008
	Yes	11.2%	21.7%		0.6	0.5–0.9	
Cardio-vascular disease/antecedents *	No	87.6%	20.9%	.01			
	Yes	12.4%	27.1%				
Pill contra-indications	No	70.9%	19.2%	<.001			
	Yes	29.1%	26.6%				
regular gynecological follow-up *	No	10.0%	11.2%	<.001	2.3	1.2–4.2	<.001
	GP	14.0%	7.2%		1		

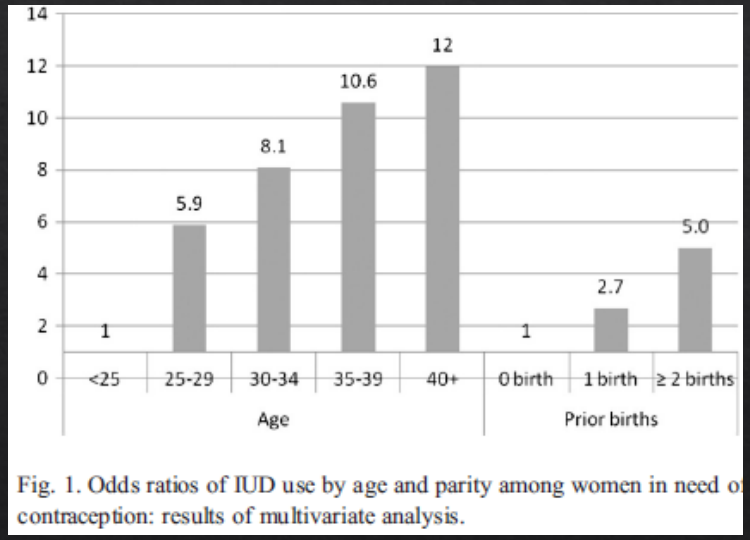


Fig. 1. Odds ratios of IUD use by age and parity among women in need o
contraception: results of multivariate analysis.

Moreau, Fecond group et al. Contraception 2014

Utilisation du DIU en France, perception par les médecins

Table 2
Women and Physicians' perceptions about the IUD

		Yes totally	Rather yes	Rather not	Not at all	Don't know
The IUD can alter future fertility	Women	7%	11%	30%	35%	16%
The IUD is only for women who already have children	Women	37%	20%	12%	26%	6%
The IUD is contra-indicated for nulliparous women	Gynecologists	41%	27%	14%	18%	
	GP	43%	42%	8%	8%	
	Total physicians	43%	40% *	8%	7%	
The IUD is comfortable to use	Women	30%	20%	17%	15%	16%
	Gynecologists	34%	24%	33%	9%	
	GP	18%	37%	36%	10%	
	Total physicians	19%	35% *	36%	9%	
The IUD is very often well tolerated	Gynecologists	36%	50%	14%	0%	
	GP	18%	51%	29%	1%	
	Total physicians	20%	51%	28%	1%	
The IUD is associated with a high risk of pelvic infection	Gynecologists	6%	23%	45%	27%	
	GP	13%	27%	33%	28%	
	Total physicians	12%	26% *	34%	27%	
The IUD is the most effective reversible method	Gynecologists	9%	27%	43%	21%	
	GP	7%	23%	50%	20%	
	Total physicians	7%	23% *	49%	20%	
The IUD is associated with a high risk of ectopic pregnancy	Gynecologists	10%	33%	42%	15%	
	GP	14%	40%	34%	12%	
	Total physicians	13%	39% *	35%	12%	

→ 83%

→ 54%

→ 38%

→ 30%

→ 52%

Efficacité – Grossesse non prévue

The Contraceptive CHOICE Project : Cohorte longitudinal de 9252 femmes sur 3 ans

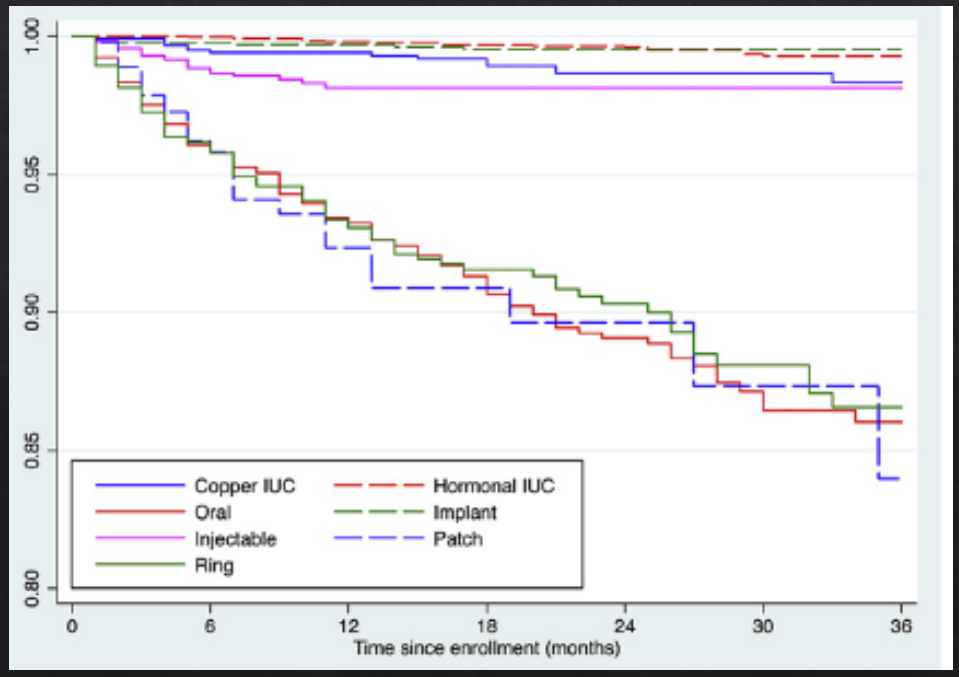
As-used	Unadjusted		Adjusted[a]	
Contraceptive method	Hazard ratio (95% CI)		Hazard ratio (95% CI)	
Hormonal IUC	1.0	ref	1.0	ref
Copper IUC	2.8	(1.4–5.6)	3.1	(1.5–6.2)
Implant	1.0	(0.4–2.4)	0.8	(0.4–2.0)
Injectable	5.5	(3.0–10.0)	4.5	(2.5–8.2)
Oral	24.6	(15.1–40.0)	28.0	(17.3–45.4)
Patch	25.1	(13.8–45.6)	22.8	(12.7–41.0)
Ring	24.2	(14.7–40.0)	31.3	(19.1–51.3)

Women who delayed initiation of their chosen method are excluded from intent-to-use analysis.

CI, confidence interval; *copper IUC*, copper T380A intrauterine contraceptive; *hormonal IUC*, levonorgestrel 52 mg intrauterine contraceptive; *implant*, etonogestrel 68 mg subdermal implant; *injectable*, depot medroxyprogesterone acetate 150 mg; *oral*, oral contraceptive; *patch*, transdermal contraceptive; *ring*, vaginal ring contraceptive.

[a] Adjusted for age, prior unintended pregnancies, race, education, and public assistance.

Reeves et al. Risk of pregnancy by initial contraception choice. Am J Obstet Gynecol 2016.



Grossesse extra-utérine et DIU

Physiopathologie de la GEU: Devenir enceinte , PUIS une nidation dans la trompe

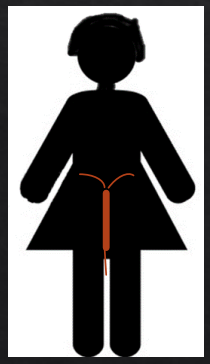
✓ Réduction du risque de récidive de GEU en cas d'utilisation de DIU
- en comparaison aux non-utilisatrice de DIU (autres contraception ou rien)

Bernoux et al. HR 2000

- en comparaison à l'absence de contraception

Skjeldestad. AOGS 1997 ; Zhang et al. BJOG 2016

Non enceinte



Risque de GEU

★

Enceinte

★

Risque de GEU

Infections Génitales Hautes et DIU

✓ Risque faible en 1992.
Etude de cohorte 22908 femmes avec DIU, soit 51399 femme-année. Fréquence de 1 cas/1000 femmes-année

- Maximum dans les 20 premiers jours puis diminution par 9 du risque

Farley et al. Lancet 1992

✓ Risque toujours faible en 2012.
Etude de cohorte 57728 femmes avec DIU. Fréquence de 0,54%

Sufrin et al. Obstet and Gynecol 2012

✓ Risque encore plus faible avec DIU-LNG.
Etude randomisé versus DIU cuivre. Risque 3 fois moindre avec DIU-LNG

Toivonen et al. Obstet and Gynecol 1991

Infertilité et DIU ?

- ✓ Risque plutôt lié à l'antécédent d'IST plutôt qu'à l'antécédent de DIU.

Hubacher et al. NEJM 2001

TABLE 5. USE OF A COPPER IUD, THE PRESENCE OF ANTIBODIES TO *CHLAMYDIA TRACHOMATIS*, AND THE RISK OF TUBAL OCCLUSION.*

IUD USE AND PRESENCE OF ANTIBODIES TO CHLAMYDIA	INFERTILE WOMEN WITH TUBAL OCCLUSION (N=358)	INFERTILE CONTROLS (N=953)	ODDS RATIO (95% CI)	PREGNANT CONTROLS (N=584)	ODDS RATIO (95% CI)†
	no. (%)			no. (%)	
No use of a copper IUD					
Antibody-negative	203 (56.7)	583 (61.2)	1.0	420 (71.9)	1.0
Antibody-positive	132 (36.9)	313 (32.8)	1.2 (0.9–1.6)	124 (21.2)	2.4 (1.7–3.2)
Use of a copper IUD					
Antibody-negative	18 (5.0)	33 (3.5)	1.5 (0.8–2.8)	32 (5.5)	1.1 (0.6–2.1)
Antibody-positive	5 (1.4)	24 (2.5)	0.6 (0.2–1.5)	8 (1.4)	1.3 (0.4–4.1)

*For infertile women, data represent the use of a copper intrauterine device (IUD) before the women suspected a fertility problem. Antibody titers of 1:256 or greater were considered positive. For all comparisons, women with no use of a copper IUD and no antibodies to chlamydia served as the reference group. The ratios were adjusted for age, income, number of sexual partners, years of education, and history of sexual intercourse during the teenage years. CI denotes confidence interval.

†The odds ratios are for the comparison with the infertile women with tubal occlusion.

Nullipare et DIU

Taux d'utilisation à 12 mois de l'insertion : 74% (meta-analyse: 4131 femmes issues de 12 études - 6 rétrospectives et 6 prospectives-)

Diedrich et al. AJOG 2017

- ✓ Efficace et sure
- ✓ Réduction risque de lésions haut grades cervical

Epic cohort. Plos one. 2016

- ✓ Douleur lors de la pose (64% ⇔ dysménorrhée, 14% la juge sévère, 1/3 s'attendait à plus douloureux)
- ✓ Perforation 1/1000
- ✓ Expulsion de 1-8%, principalement dans les 15 jours ou lors de règles
- ✓ Augmentation possible volume de regles et dysménorrhée
- ✓ Spottings, acnée, kyste fonctionnel en cas de DIU-LNG

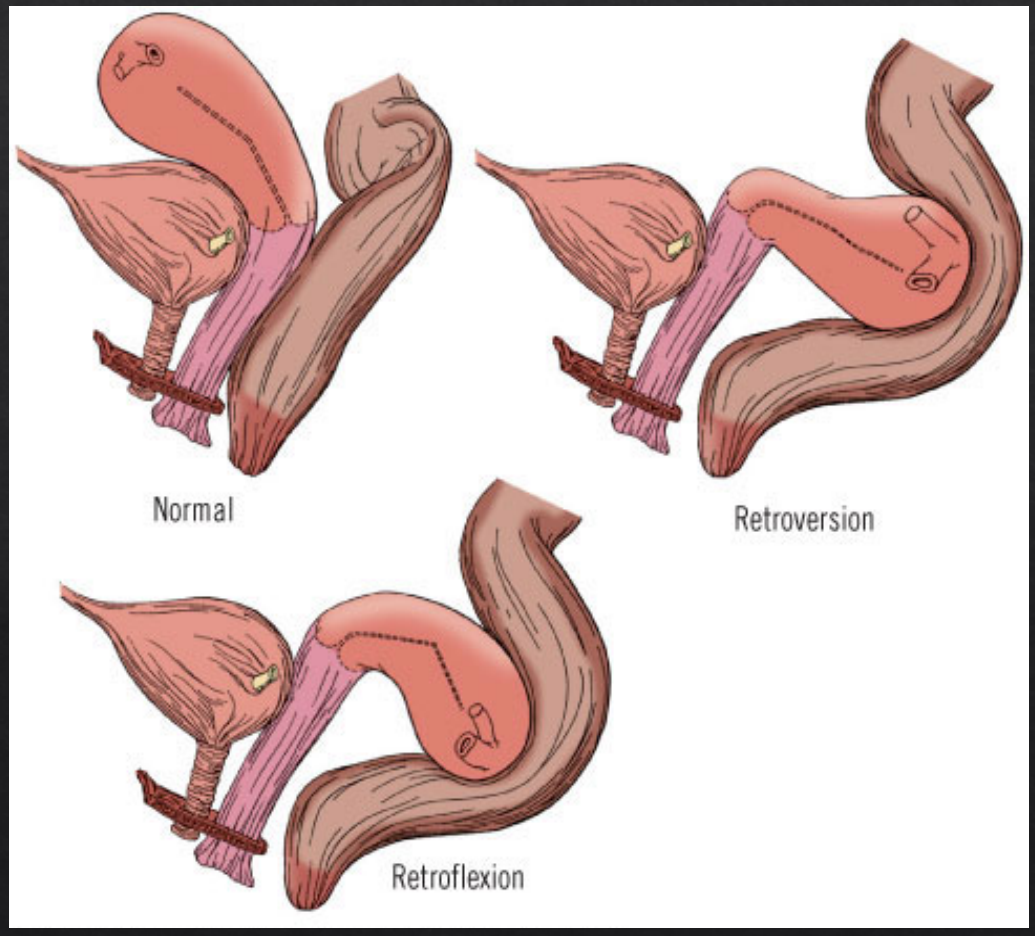
LE DIU en Pratique

GynAzur

Table 1. Medical Eligibility Criteria (MEC) for Initiation of LARC Methods — Conditions for which at Least One LARC Method Should Not Be Used (MEC 4) or Should Not Generally Be Used (MEC 3).*

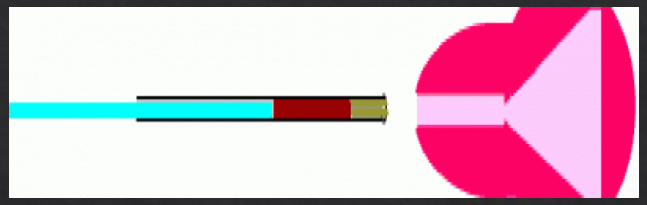
Condition	Category of Medical Eligibility Criteria			Comments
	Copper-Containing IUD	LNG-IUD	Implant	
Pregnancy	4	4	NA	The use of an implant is not needed; no known harm to the woman, to the course of her pregnancy, or to the fetus occurs if an implant is inadvertently used during pregnancy.
Distorted uterine cavity incompatible with IUD placement	4	4	NA	An anatomical abnormality that distorts the uterine cavity might preclude proper IUD placement.
Current pelvic inflammatory disease, gonococcal or chlamydial infection, or purulent cervicitis	4	4	1	Insertion of an IUD might worsen the condition.
Postpartum or postabortion sepsis	4	4	NA	Insertion of an IUD might worsen the condition.
Persistent intrauterine gestational trophoblastic disease	4	4	1	An IUD should not be inserted because of the theoretical risk of perforation, infection, and hemorrhage.
Cervical cancer	4	4	2	Concern exists about the increased risk of infection and bleeding at insertion. The IUD will probably need to be removed at the time of cancer treatment.
Endometrial cancer	4	4	1	Concern exists about the increased risk of infection, perforation, and bleeding at insertion. The IUD will probably need to be removed at the time of cancer treatment.
Unexplained vaginal bleeding (raising suspicion of serious condition)	4	4	3	If pregnancy or an underlying pathologic condition (e.g., pelvic cancer) is suspected, it must be evaluated and the category adjusted after evaluation. Irregular bleeding patterns associated with the method used might mask symptoms of underlying pathologic conditions.
Current breast cancer	1	4	4	Hormonal stimulation may worsen the condition.
History of breast cancer with no evidence of disease for 5 years	1	3	3	—
Complicated solid-organ transplantation	3	3	2	Data on risks and benefits are limited in this population.
Systemic lupus erythematosus (with severe thrombocytopenia)	3	2	2	Concern exists about an increased risk of bleeding.
Systemic lupus erythematosus (with positive or unknown antiphospholipid antibodies)	1	3	3	Concern exists about an increased risk of both arterial and venous thrombosis.
Severe, decompensated cirrhosis	1	3	3	Hormonal exposure may worsen the condition.
Hepatocellular adenoma or hepatic malignancy	1	3	3	Hormonal exposure may worsen the condition.

- ✓ Dysménorrhée, ménorragies ?
- ✓ Examen physique avec spéculum, TV : Utérus rétroversé ? Cervicite ?
- ✓ FCU et dépistage chlamydia/vaginose
- ✓ Echographie pelvienne : morphologie utérine. Coupe frontal 3D


Normal
Retroversion
Retroflexion

DIU technique de pose

1



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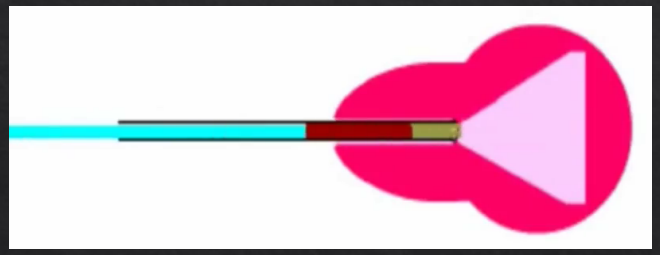

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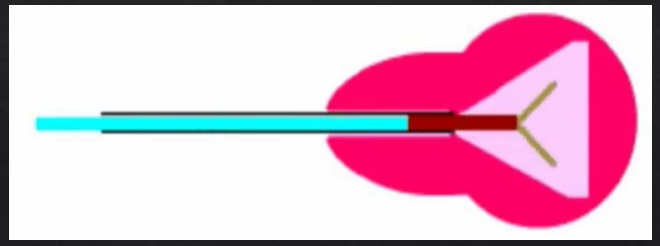

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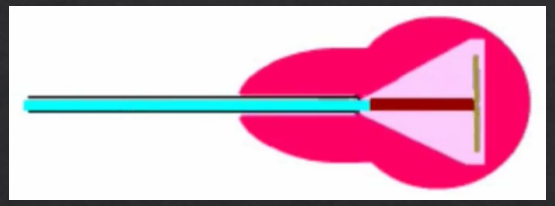

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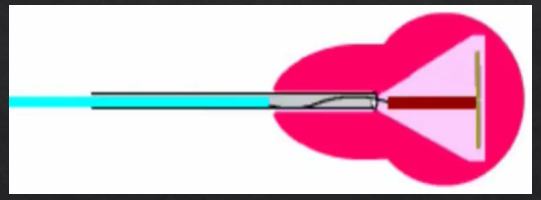


- ✓ Pose du DIU possible jusqu'à 4 jours après l'ovulation, mais idéalement en fin de règles
- ✓ En post partum des 3 mois

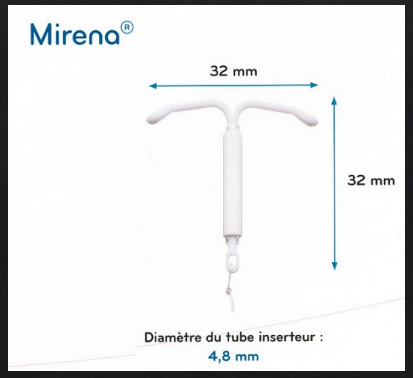
Baldwin et al. AJOG 2016

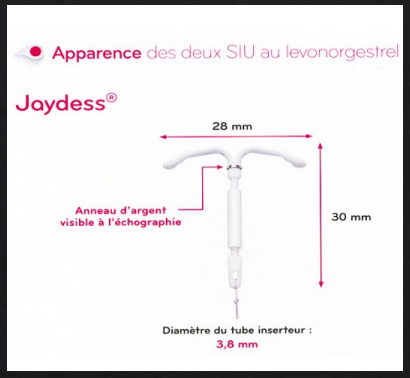
- ✓ Durée du DIU au cuivre : 5 à10 ans
- ✓ Durée du DIU hormonal 3 ans ou 5 ans selon sa taille

DIU hormonal ou non ?

- ✓ Kyste fonctionnel
- ✓ Prise de poids
- ✓ Hyperséborrhée, acnée, chute de cheveux

- ✓ Diminution ménorragie
- ✓ Diminution dysménorrhée
- ✓ Utilisable en cas de risque artériel ou veineux





Surveillance du DIU: Actinomycoses

✓ 10% de FCU positif en cas de DIU

Westhoff et al. Contraception 2007

Quel conduite à tenir ?

> 50 ans
> DIU > 5 ans

Risque de développer une actinomycose pelvienne → Oui → Retrait

Echographie pelvienne

ATB si signe clinique ou échographie

Contrôle de la guérison par FCU

Symptomatologie de novo : Dysménorrhée, dyspareunie profonde, dysurie, métrorragies

Spéculum : cervicite, leucorrhée pathologiques

Douleur à la mobilisation utérine

Masse annexielle ou bombant dans le douglas

Risque d'avoir une actinomycose pelvienne → Oui → Contrôle de la guérison par FCU

non → Contrôle FCU à 1 an

Westhoff et al. Contraception 2007 ; FFPRHC Guidance 2004

Surveillance du DIU
Bon positionnement

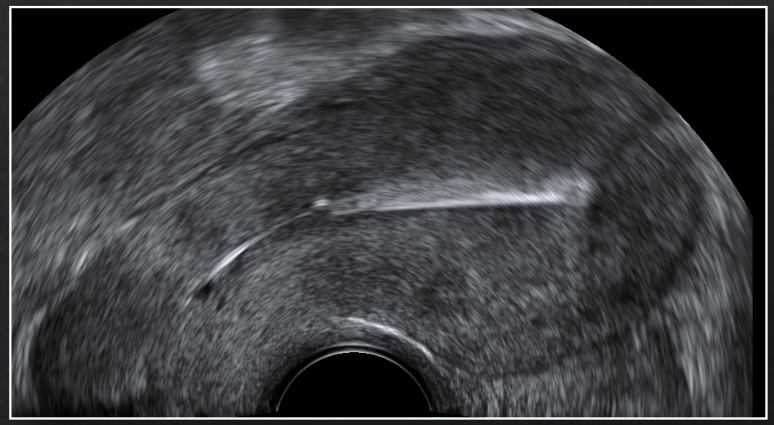
- ✓ Dysménorrhée ? Ménorragie ? Spottings ?
- ✓ Speculum : Voir les fils.

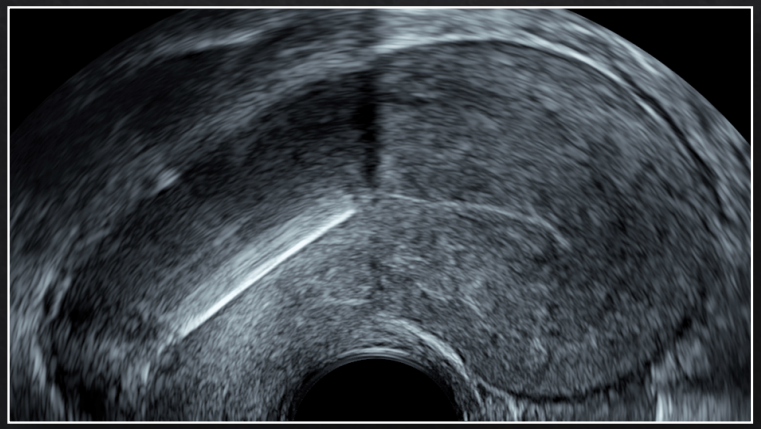
non →

Grossesse ? Myome intra cavitaire ? Migration? Expulsion ? Simple enroulement autour de la tige à recontrôler après les prochaines règles

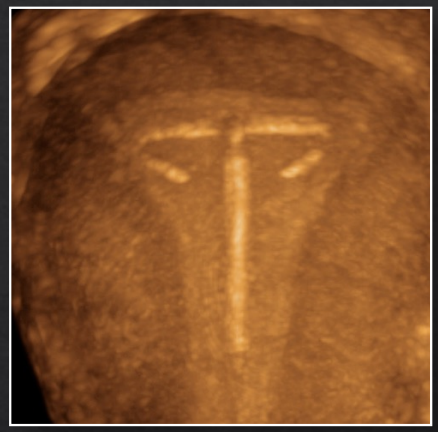
- ✓ Echographie pelvienne avec reconstruction 3D

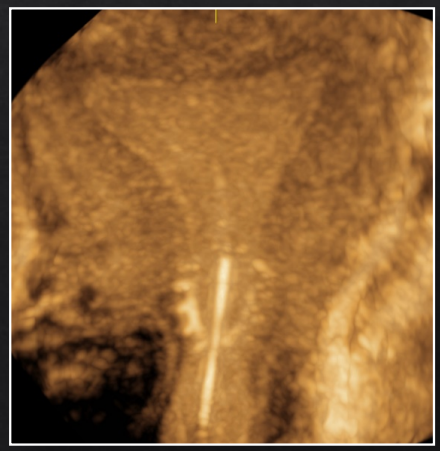
Surveillance du DIU: Bon positionnement





Distance fond uterus-
DIU < 20mm





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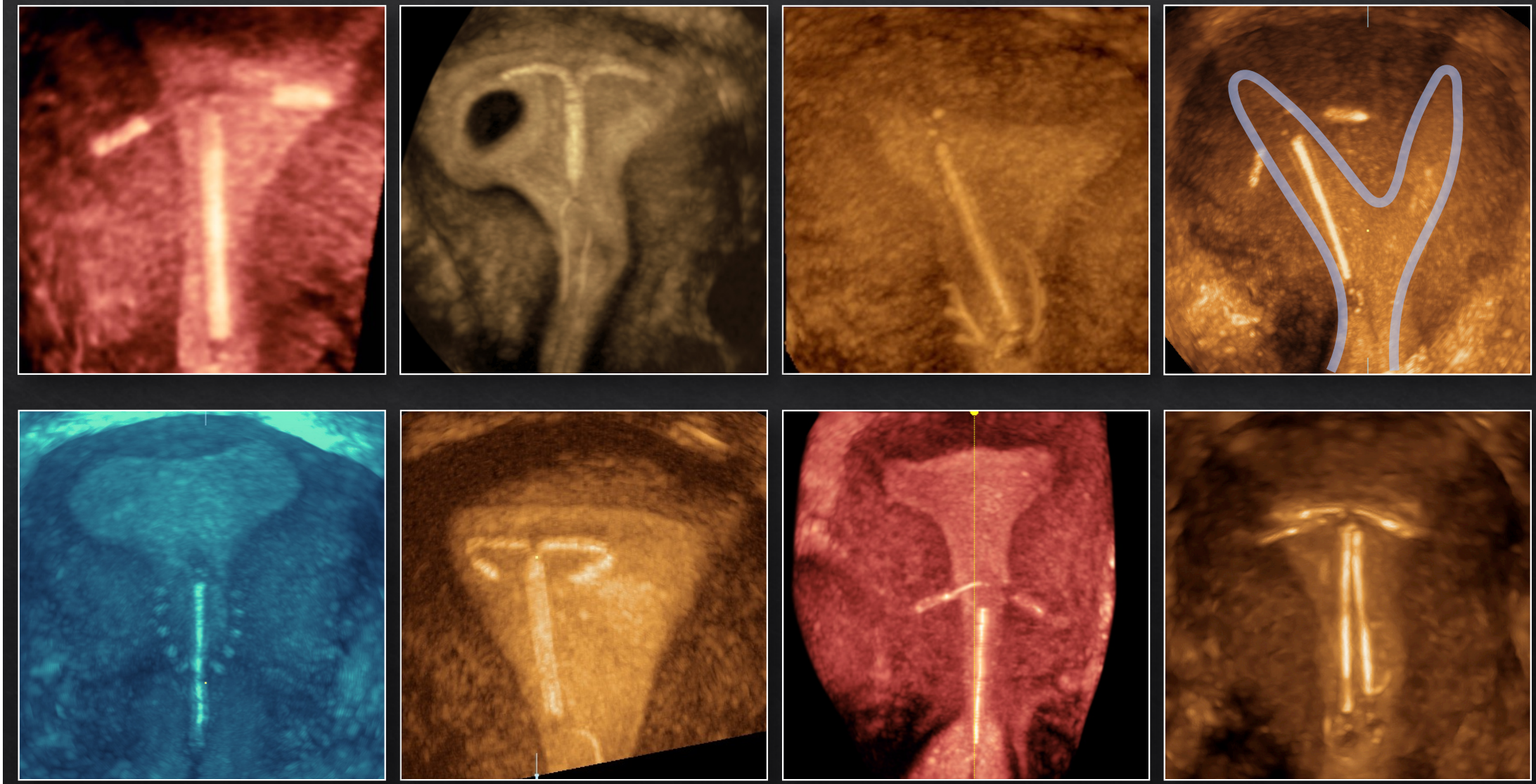


Dr Bernard Benoit

Surveillance: Grossesse sous DIU

- ✓ Augmentation des complications obstétricales : FCSP, RPM, Placenta praevia, chorioamniotite

  Brahmi et al. Contraception 2012

- ✓ D'autant plus que le DIU est en position basse proche de l'orifice interne

  Seval Ozgu-Erdinc et al. Contraception 2014

- ✓ Avantage au retrait precoce versus pas de retrait, sans revenir aux meme risque qu'une grossesse sans DIU

  Ganer et al. AJOG 2009

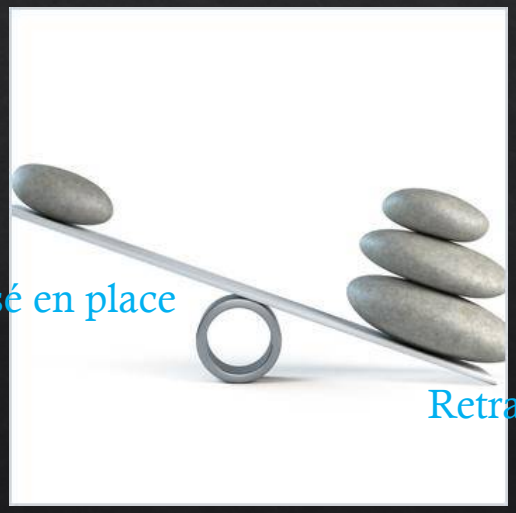
DIU et ménopause

- ✓ Augmentation des complications: Pyometrie, actinomycose, metrorragies post ménopausique

Pilai et al. J Fam Plann Reprod Health care 2009

- ✓ Augmentation sténose du col, atrophie avec la ménopause -> Difficulté de retrait

Newton et al. Lancet 1990



✓ DIU hormonal et ménopause ? Faire un dosage FSH repetés à 6 semaines. Si FSH > 30UI, pas de necessité de poursuivre le DIU au delà de 12 mois.

Merci de votre attention