Les complications obstétricales de la conisation

Prof. Bruno Langer

Présenté au Séminaire de l'association EVE
le 10 février 2018 à Strasbourg

Hôpital de Hautepierre
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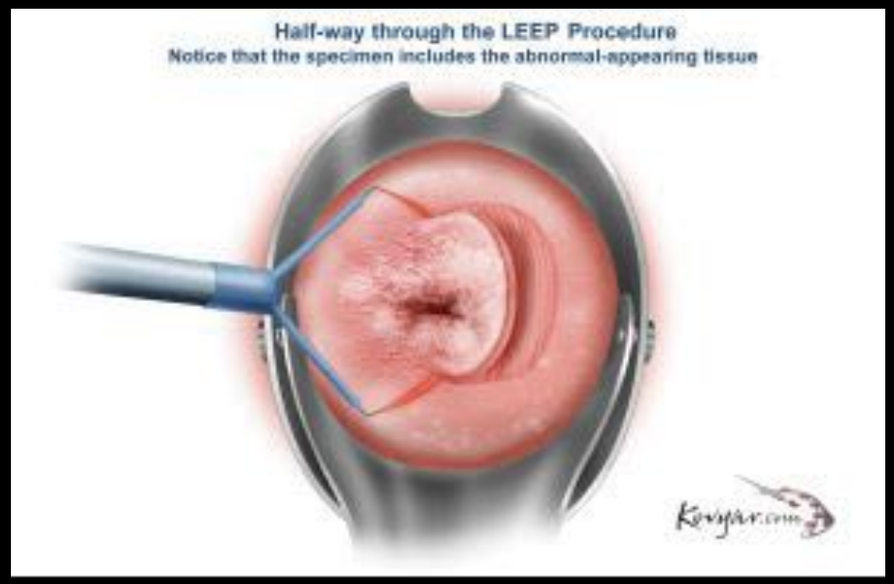
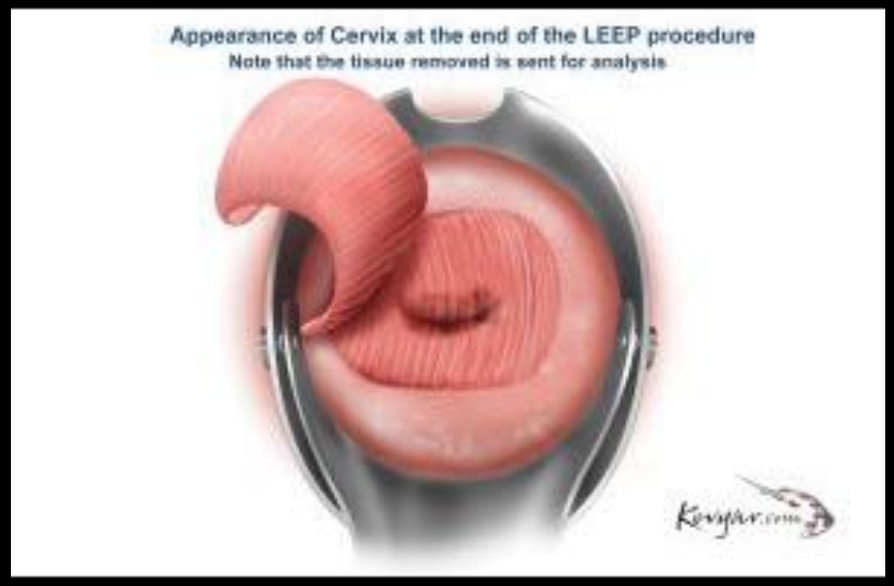
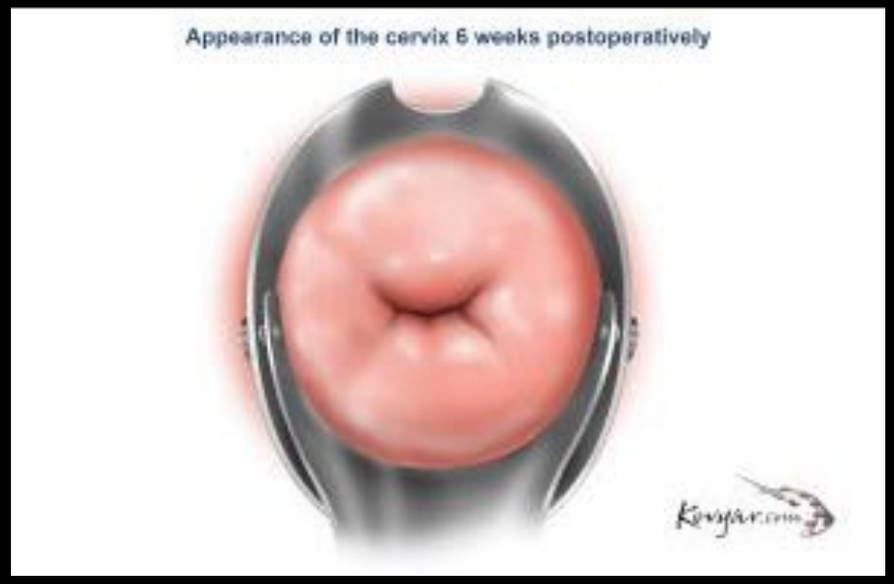
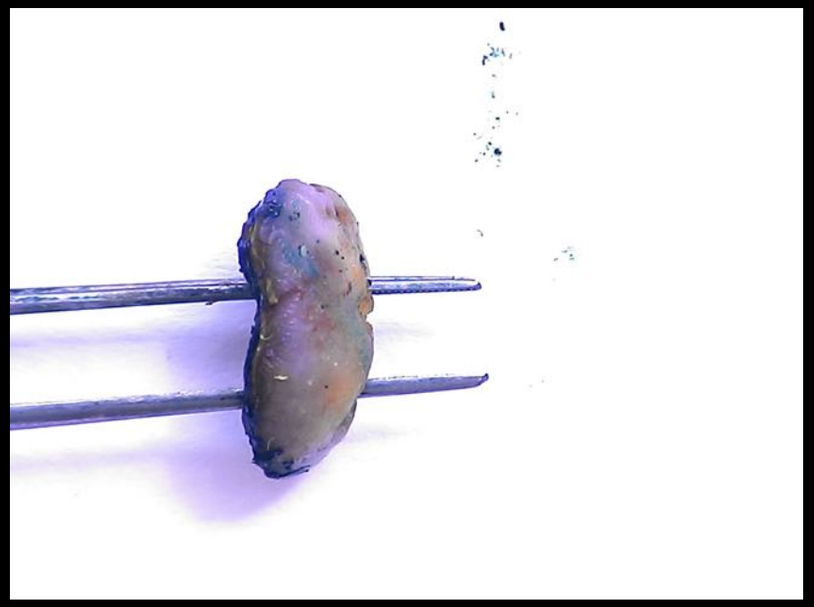
CHU de Strasbourg

Conisation


Half-way through the LEEP Procedure
Notice that the specimen includes the abnormal-appearing tissue


Appearance of Cervix at the end of the LEEP procedure
Note that the tissue removed is sent for analysis


Appearance of the cervix 6 weeks postoperatively



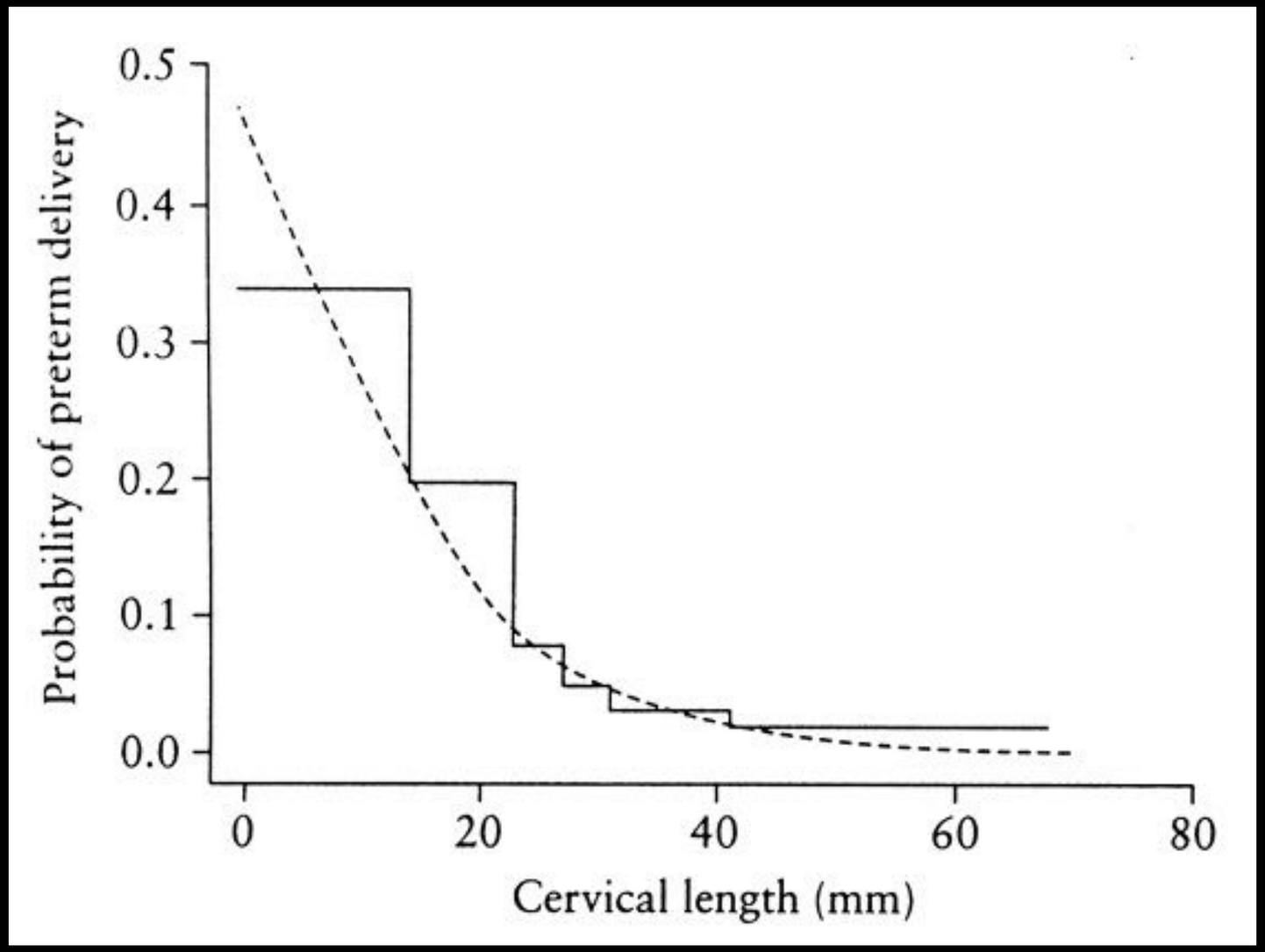
Longueur de col et prématurité

THE LENGTH OF THE CERVIX AND THE RISK OF SPONTANEOUS PREMATURE DELIVERY

Jay D. Iams, M.D., Robert L. Goldenberg, M.D., Paul J. Meis, M.D., Brian M. Mercer, M.D., Atef Moawad, M.D., Anita Das, M.S., Elizabeth Thom, Ph.D., Donald McNellis, M.D., Rachel L. Copper, M.S.N., C.R.N.P., Francee Johnson, R.N., B.S.N., James M. Roberts, M.D., and the National Institute of Child Health and Human Development Maternal Fetal Medicine Unit Network*

(N Engl J Med 1996;334:567-72.)

% Accoucht < 35 SA



Conisation et prématurité

Adverse obstetric outcomes after local treatment for cervical preinvasive and early invasive disease according to cone depth: systematic review and meta-analysis

BMJ 2016;354:i3633

Maria Kyrgiou,[1,2] Antonios Athanasiou,[3] Maria Paraskevaidi,[1] Anita Mitra,[1,2] Ilkka Kalliala,[1] Pierre Martin-Hirsch,[4,5] Marc Arbyn,[6] Phillip Bennett,[1,2] Evangelos Paraskevaidis[3]

Prématurité < 37 SA

Preterm birth	No of studies	Total No of women	No (%) of women		Effect estimate RR (95% CI)	P value for heterogeneity (I^2%)
			Treated	Untreated		
<37 weeks' gestation						
All treatment types	60	5 244 560	6506/60 619 (10.7)	281 575/5 183 941 (5.4)	1.78 (1.60 to 1.98)	<0.001 (88)
Conisation bistouri froid	12	39 102	126/844 (14.9)	2321/38 258 (6.1)	2.70 (2.14 to 3.40)	0.62 (0)
Conisation laser	9	1464	96/672 (14.3)	58/792 (7.3)	2.11 (1.24 to 3.57)	0.02 (56)
Exerese aiguille	1	7399	17/71 (23.9)	301/7328 (4.1)	5.83 (3.80 to 8.95)	N/E
Exerese endoloop	26	1 445 341	1724/21 318 (8.1)	66 607/1 424 023 (4.7)	1.56 (1.36 to 1.79)	<0.001 (69)
Ablation laser	7	4710	168/1867 (9.0)	242/2843 (8.5)	1.04 (0.86 to 1.26)	0.48 (0)
Cryothérapie	2	238	4/151 (2.6)	2/87 (2.3)	1.02 (0.22 to 4.77)	0.67 (0)
Ablation diathermie	1	2150	109/760 (14.3)	123/1390 (8.8)	1.62 (1.27 to 2.06)	N/E
Excisional treatment NOS	15	3 107 438	3788/28 104 (13.4)	183 133/3 079 334 (5.9)	2.02 (1.60 to 2.55)	<0.001 (95)
Ablative treatment NOS	5	595 272	430/6482 (6.6)	26 804/588 790 (4.6)	1.46 (1.27 to 1.66)	0.22 (30)
Treatment NOS	3	41 401	44/350 (12.6)	1979/41 051 (4.8)	2.20 (1.28 to 3.78)	0.07 (62)

NOS : mode non spécifié

Prématurité < 32-34 SA

Preterm birth	No of studies	Total No of women	No (%) of women		Effect estimate RR (95% CI)	P value for heterogeneity (I²%)
			Treated	Untreated		
<32-34 weeks' gestation						
All treatment types	25	3795351	1375/39647 (3.5)	53835/3755704 (1.4)	2.40 (1.92 to 2.99)	<0.001 (82)
Conisation bistouri froid	5	36979	15/283 (5.3)	920/36696 (2.5)	3.07 (1.72 to 5.49)	0.65 (0)
Exerese aiguille	1	7399	5/71 (7.0)	49/7328 (0.7)	10.53 (4.33 to 25.65)	N/E
Exerese endoloop	11	791554	237/11569 (2.0)	9504/779985 (1.2)	2.13 (1.66 to 2.75)	0.08 (40)
Cryothérapie	1	58	1/36 (2.8)	0/22 (0.0)	1.86 (0.08 to 43.87)	N/E
Excisional treatment NOS	10	2832112	1000/22562 (4.4)	42598/2809550 (1.5)	3.05 (1.95 to 4.78)	<0.001 (91)
Ablative treatment NOS	2	120762	26/2549 (1.0)	686/118213 (0.6)	1.59 (1.08 to 2.35)	0.92 (0)
Treatment NOS	2	6487	91/2577 (3.5)	78/3910 (2.0)	1.65 (1.13 to 2.42)	0.25 (24)

Prématurité < 28-30 SA

Preterm birth	No of studies	Total No of women	No (%) of women		Effect estimate RR (95% CI)	P value for heterogeneity (I^2%)
			Treated	Untreated		
<28-30 weeks' gestation						
All treatment types	9	3 912 106	403/39 154 (1.0)	12 887/3 872 952 (0.3)	2.54 (1.77 to 3.63)	<0.001 (81)
Conisation bistouri froid	2	7118	2/150 (1.3)	19/6968 (0.3)	4.52 (0.83 to 24.54)	0.74 (0)
Exerese aiguille	1	7399	3/71 (4.2)	21/7328 (0.3)	14.74 (4.50 to 48.32)	N/E
Exerese endoloop	3	502778	59/8899 (0.7)	1224/493 879 (0.2)	2.57 (1.97 to 3.35)	0.9 (0)
Excisional treatment NOS	4	2 821 185	287/21 984 (1.3)	9854/2 799 201 (0.4)	2.90 (1.52 to 5.52)	<0.001 (88)
Ablative treatment NOS	3	568 217	23/6125 (0.4)	1739/562 092 (0.3)	1.38 (0.81 to 2.36)	0.21 (35)
Treatment NOS	1	5409	29/1925	30/3484	1.75 (1.05 to 2.91)	N/E

CKC=cold knife conisation; CT=cryotherapy; LA=laser ablation; LC=laser conisation; LLETZ=large loop excision of transformation zone; N/E=not eligible; NETZ=needle excision of transformation zone; NOS=not otherwise specified; RD=radical diathermy.

*If study had more than one comparison groups, we used external groups (external general, external untreated women who had colposcopy+/-CIN+/-biopsy, women with HSIL but no treatment) in preference to internal comparators (self matching or pregnancies before treatment).

†In cases of heterogeneity in cut-offs used for classification of prematurity, these were grouped together when possible (for instance, 32-34 or 28-30 weeks included both cut offs).

Risque de prématurité selon le nombre de traitement

	No of studies	Total No of women	No (%) of women		Effect estimate RR (95% CI)	P value for heterogeneity (I^2%)
			Treated	Untreated		
Single treatment						
All treatment types	17	1 367 023	1519/20 302 (7.5)	56 185/1 346 721 (4.2)	1.75 (1.49 to 2.06)	<0.001 (79)
CKC	3	36 783	38/179 (21.2)	2250/36604 (6.1)	2.89 (2.08 to 4.03)	0.42 (0)
LC	2	657	34/335 (10.1)	29/322 (9.0)	1.06 (0.54 to 2.09)	0.17 (48)
NETZ	1	7399	17/71 (23.9)	301/7328 (4.1)	5.83 (3.80 to 8.95)	N/E
LLETZ	9	1 277 874	1139/16 755 (6.8)	51 075/1 261 119 (4.0)	1.74 (1.45 to 2.10)	<0.001 (75)
LA	4	1421	58/624 (9.3)	68/797 (8.5)	1.07 (0.66 to 1.74)	0.17 (40)
Excisional treatment NOS	3	32 106	197/1816 (10.8)	1840/30 290 (6.1)	1.88 (1.20 to 2.93)	0.1 (57)
Ablative treatment NOS	1	10 783	36/522 (6.9)	622/10 261 (6.1)	1.14 (0.82 to 1.57)	N/E
Repeat treatment						
All treatment types	11	1 317 284	191/1442 (13.2)	54 142/1 315 842 (4.1)	3.78 (2.65 to 5.39)	<0.001 (75)
CKC/LA	1	99	2/2 (100.0)	6/97 (6.2)	12.56 (5.11 to 30.87)	N/E
LC/LC	1	270	6/20 (30.0)	20/250 (8.0)	3.75 (1.70 to 8.27)	N/E
LLETZ/LLETZ	4	1 202 174	139/1195 (11.6)	48 586/1 200 979 (4.0)	2.81 (2.33 to 3.39)	0.35 (9)
LLETZ/treatment NOS	1	298	9/41 (22.0)	6/257 (2.3)	9.40(3.53 to 25.03)	N/E
Excisional NOS/excisional treatment NOS	3	73 651	17/57 (29.8)	3034/73 594 (4.1)	5.48 (2.68 to 11.24)	0.16 (45)
Treatment NOS/treatment NOS	2	40 792	18/127 (14.2)	2490/40 665 (6.1)	1.71 (1.10 to 2.67)	0.85 (0)

Risque de prématurité selon la taille du cône enlevé

Table 3 | Preterm birth (<37 weeks' gestation) in women with cervical intraepithelial neoplasia (CIN) for treated versus untreated women according to cone depth and volume

	No of studies	Total No of women	No (%) of women		Effect estimate RR (95% CI)	P value for heterogeneity (I^2%)
			Treated	Untreated		
Cone depth						
≤10-12 mm						
All treatment types	8	550 929	293/4105 (7.1)	18720/546824 (3.4)	1.54 (1.09 to 2.18)	0.004 (67)
LC	1	105	1/41 (2.4)	3/64 (4.7)	0.52 (0.06 to 4.83)	N/E
LLETZ	3	544 907	98/1600 (6.1)	18448/543307 (3.4)	2.01 (1.28 to 3.15)	0.13 (51)
Excisional treatment NOS	4	5917	194/2464 (7.9)	269/3453 (7.8)	1.20 (0.78 to 1.85)	0.15 (44)
≤15-17 mm						
All treatment types	4	545 939	149/2614 (5.7)	18493/543325 (3.4)	1.36 (1.15 to 1.61)	0.61 (0)
LC	1	164	0/14 (0.0)	7/150 (4.7)	0.67 (0.04 to 11.18)	N/E
LLETZ	2	545 119	117/2370 (4.9)	18434/542749 (3.4)	1.42 (1.18 to 1.70)	0.41 (0)
Excisional treatment NOS	1	656	32/230 (13.9)	52/426 (12.2)	1.14 (0.76 to 1.72)	N/E
≤20 mm						
All treatment types	3	545 992	174/3093 (5.6)	18441/542899 (3.4)	1.60 (1.38 to 1.87)	0.62 (0)
LC	1	183	2/33 (6.1)	7/150 (4.7)	1.30 (0.28 to 5.97)	N/E
LLETZ	2	545 809	172/3060 (5.6)	18434/542749 (3.4)	1.61 (1.38 to 1.87)	0.35 (0)

Risque de prématurité selon le volume du cône enlevé

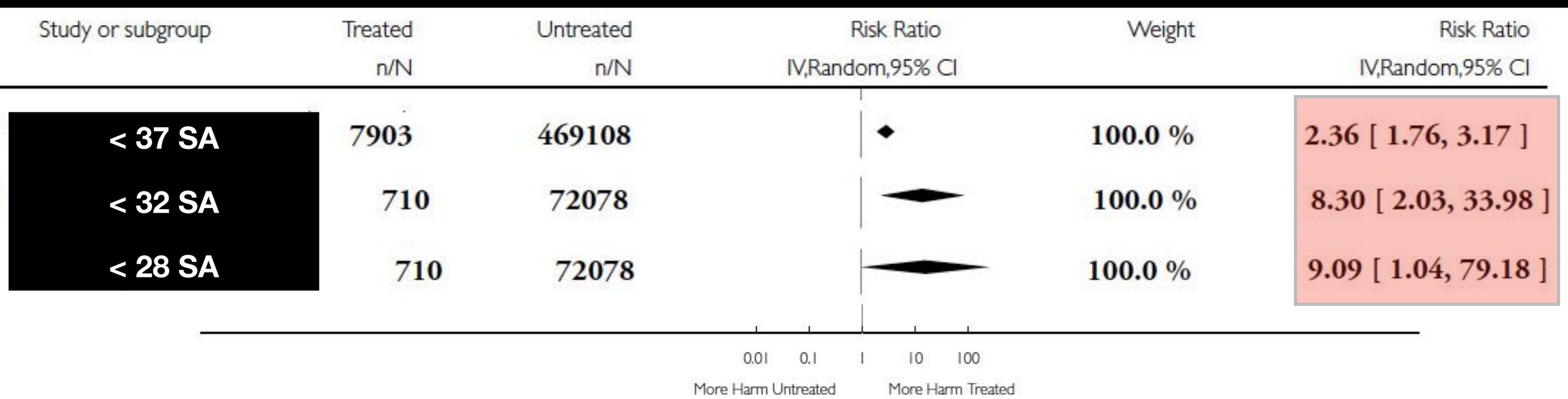
	No of studies	Total No of women	No (%) of women		Effect estimate RR (95% CI)	P value for heterogeneity (I^2%
			Treated	Untreated		
Cone volume						
<3 cc						
All treatment types	1	496	16/218 (7.3)	10/278 (3.6)	2.04 (0.94 to 4.41)	N/E
LLETZ	1	496	16/218 (7.3)	10/278 (3.6)	2.04 (0.94 to 4.41)	N/E
>3 cc						
All treatment types	1	338	9/60 (15.0)	10/278 (3.6)	4.17 (1.77 to 9.82)	N/E
LLETZ	1	338	9/60 (15.0)	10/278 (3.6)	4.17 (1.77 to 9.82)	N/E
<6 cc						
All treatment types	1	550	22/272 (8.1)	10/278 (3.6)	2.25 (1.09 to 4.66)	N/E
LLETZ	1	550	22/272 (8.1)	10/278 (3.6)	2.25 (1.09 to 4.66)	N/E
>6 cc						
All treatment types	1	284	3/6 (50.0)	10/278 (3.6)	13.9 (5.09 to 37.98)	N/E
LLETZ	1	284	3/6 (50.0)	10/278 (3.6)	13.9 (5.09 to 37.98)	N/E
3-6 cc						
All treatment types	1	332	6/54 (11.1)	10/278 (3.6)	3.09 (1.17 to 8.14)	N/E
LLETZ	1	332	6/54 (11.1)	10/278 (3.6)	3.09 (1.17 to 8.14)	N/E

Obstetric outcomes after conservative treatment for cervical intraepithelial lesions and early invasive disease (Review)

Kyrgiou M, Athanasiou A, Kalliala IEJ, Paraskevaidi M, Mitra A, Martin-Hirsch PPL, Arbyn M, Bennett P, Paraskevaidis E

Cochrane Database of Systematic Reviews 2017, Issue 11.

Risque dr RPM



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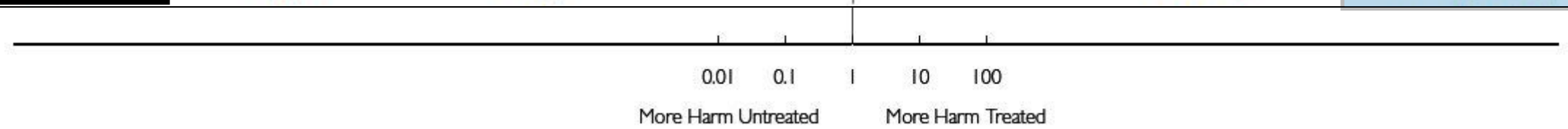
Autres conséquences obstétricales

Study or subgroup	Treated n/N	Untreated n/N	Risk Ratio IV,Random,95% CI	Weight	Risk Ratio IV,Random,95% CI
MAP	340	563		100.0 %	2.44 [1.37, 4.33]
Chorioamniotite	314	28884		100.0 %	3.43 [1.36, 8.64]
Césarienne	8942	263418		100.0 %	1.06 [0.98, 1.14]
Extr instrument	3773	5815		100.0 %	0.97 [0.88, 1.08]
Accoucht < 2H	397	662		100.0 %	1.26 [0.80, 1.96]
Accoucht > 12H	859	995		100.0 %	1.25 [0.92, 1.69]
Travail induit	1971	2697		100.0 %	1.01 [0.89, 1.15]



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Conséquences périnatales

Study or subgroup	More Harm Untreated n/N	Untreated n/N	Risk Ratio IV,Random,95% CI	Weight	Risk Ratio IV,Random,95% CI
Poids N < 2500	19489	1328717		100.0 %	1.81 [1.58, 2.07]
Poids N < 2000	1053	73928		100.0 %	2.49 [0.97, 6.36]
Poids N < 1500	1977	74859		100.0 %	3.00 [1.54, 5.85]
Poids N < 1000	971	1214		100.0 %	2.09 [0.06, 74.71]
Transfert en USI	1226	1331		100.0 %	1.45 [1.16, 1.81]
Mort périnat globale	15817	1643616		100.0 %	1.51 [1.13, 2.03]
Mort périnat < 37 SA	710	73282		100.0 %	9.40 [2.01, 43.89]
Mort périnat < 32 SA	710	73282		100.0 %	12.81 [2.70, 60.87]

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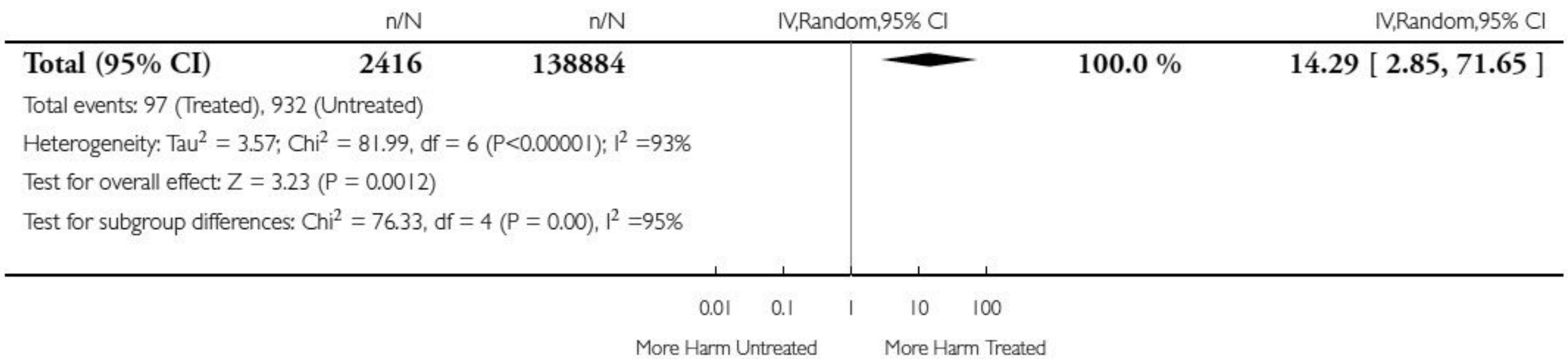
Cerclage



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Faut-il cercler ?

Cerclage sur antécédent

- **N'est pas recommandé**
  - **du fait du seul antécédent**
    - **de conisation** (grade C)
    - **de malformation utérine** quel qu'en soit le type (accord professionnel)
    - **en cas de grossesse gémellaire**
      - en prévention primaire (grade B)
      - ou secondaire (grade C)

Antécédent de conisation et col devenant court à l'écho

Effectiveness of cerclage according to severity of cervical length shortening: a meta-analysis

V. BERGHELLA*, S. M. KEELER†, M. S. TO‡, S. M. ALTHUISIUS§ and O. A. RUST¶

Ultrasound Obstet Gynecol 2010; 35: 468–473
Published online 5 January 2010 in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/uog.7547

Cerclage écho-indiqué

Study	Population Screened
Rust[4]	Singletons, twins, and triplets
Althuisius[5]	Singletons with suspected cervical insufficiency; twins
To[6]	All singletons
Berghella[7]	Singletons with risk factors for preterm birth and twins

Reference	*Singleton gestations analyzed**	*Singletons with previous PTB and CL < 25 mm (%)*	*GA at screening (weeks)*	*CL (mm)†*
Rust *et al.*[2]	207	102 (49.3)	16–24	< 25
Althuisius *et al.*[3]	35	26 (74.3)	14–27	< 25
To *et al.*[4]	253	44 (17.4)	22–24	≤ 15
Berghella *et al.*[5]	57	36 (63.2)	14–24	< 25
Total	552	208 (37.7)		

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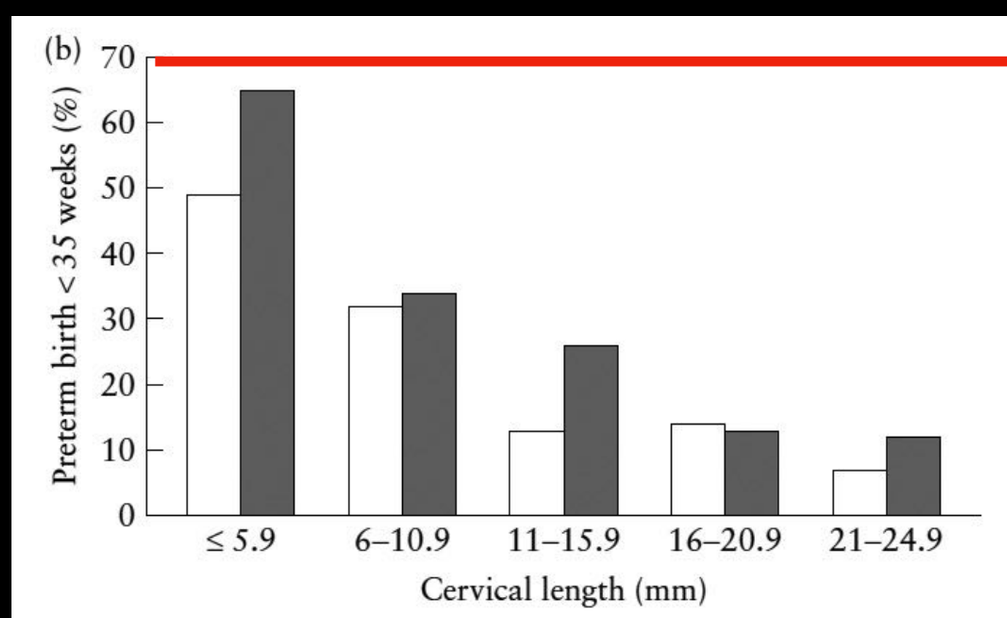
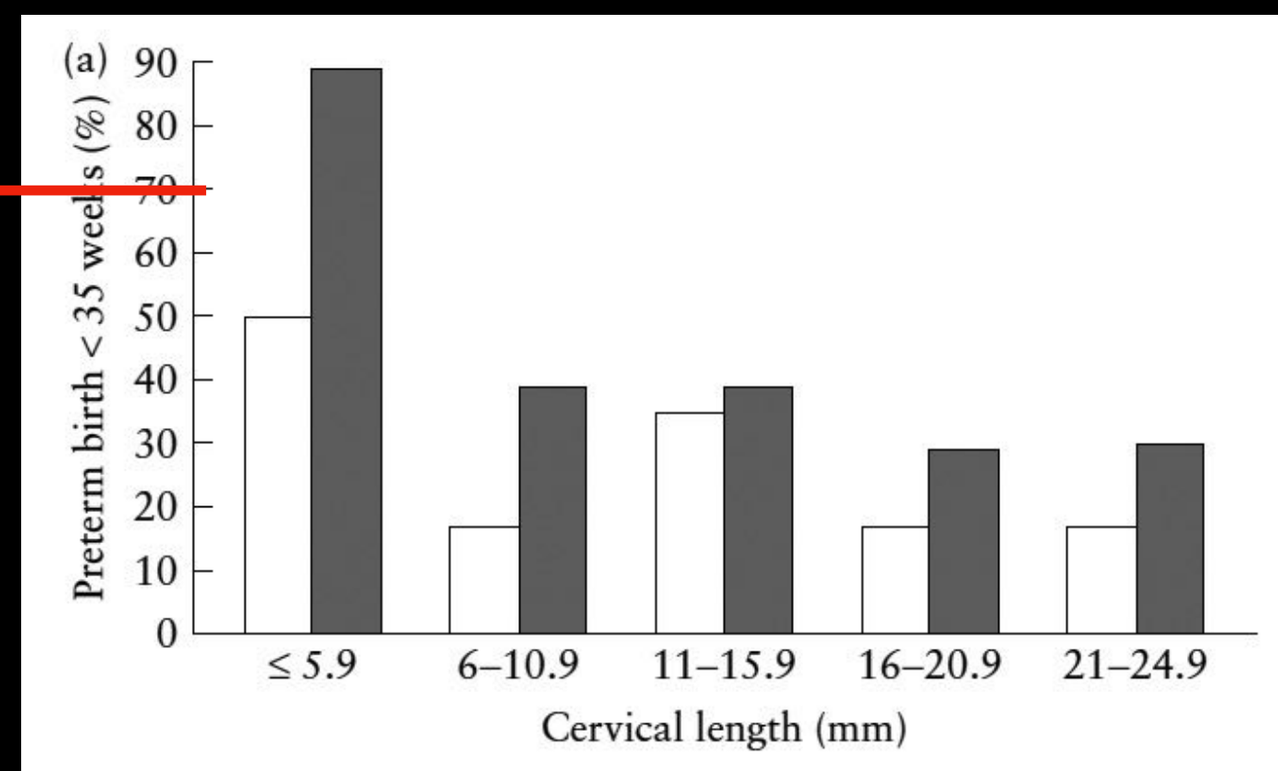
Cerclage écho-indiqué

Pas de cerclage

Cerclage





Sans antécédent d'accoucht préma
Diminution de la prématurité
10-30 %

Avec antécédent d'accoucht préma
Diminution de la prématurité
30-40 %

Effectiveness of cerclage according to severity of cervical length shortening: a meta-analysis

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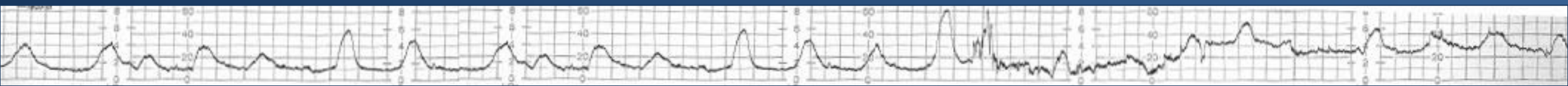
Cerclage écho-indiqué

- **Grossesse monofoetale:**
  - N'est pas recommandé en cas de col court au 2ème trimestre sans antécédent gynéco-obstétrical (Grade B)

  - En cas d'antécédent de FCT ou d'accouchement prématuré spontané avant 34 SA
    - Est recommandé une surveillance échographique de la longueur cervicale entre 16 et 22 SA
    - pour pouvoir proposer un cerclage en cas de col inférieur à 25 mm avant 24 SA (Grade C).

- **Grossesse multiple**
  - il est recommandé de ne pas réaliser de cerclage écho-indiqué en cas de col court (Grade C)



Conclusion

- ★ La conisation augmente indiscutablement :
  - Le risque de MAP
  - Le risque de RPM
  - Le risque de prématurité
  - Le risque de petit poids de naissance
  - Le risque de mortalité périnatale
- ★ Il n'y a pas d'indication de cerclage de principe sur la seule notion de conisation
- ★ Un col devenant < 25 mm avec un antécédent de conisation peut faire discuter un cerclage