

Frottis pathologiques pendant la grossesse : quelle conduite à tenir ?



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INTRODUCTION

- Prévalence des frottis anormaux chez la femme enceinte est de : 5%
- Risque de cancer invasif : 1/10000
- Optimiser le suivi pendant la grossesse, éviter les surtraitements.
- Modalités de dépistage similaire à la femme non enceinte
- Valeur de la **cytologie pendant la grossesse est comparable à celle en dehors de la grossesse, pierre angulaire du dépistage**
- Corrélation cytologie / histologie est satisfaisante

PHYSIOLOGIE

Modifications cellulaires :

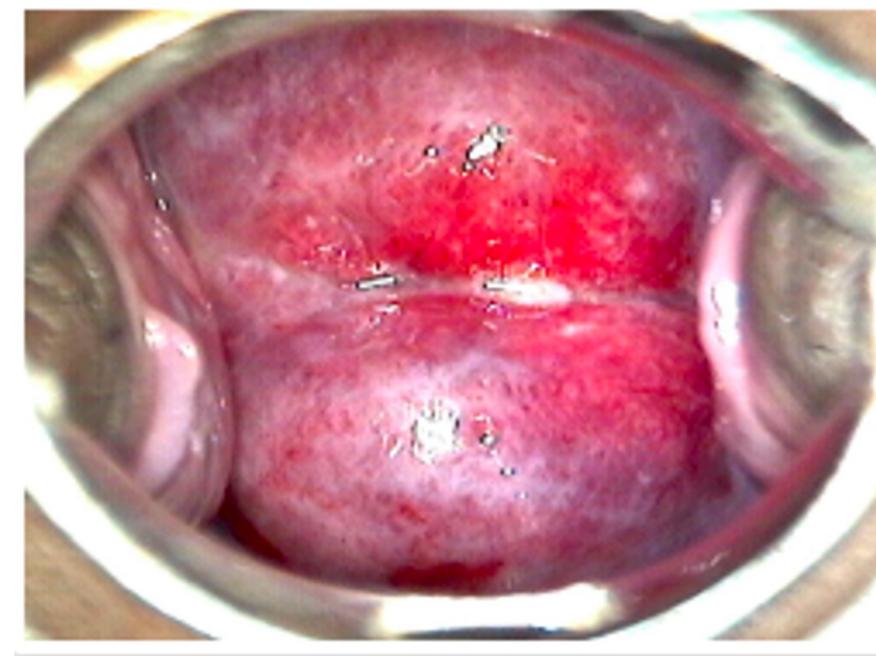
- *Cellules naviculaires* : variantes de la normale morphologique des cellules malpighiennes de l'endocol
=> *Ne pose pas de problème diagnostic*
- *Les atypies d'Aria Stella* : anomalies cytonucléaires des glandes endométriales ou endocervicales, diagnostic différentiel avec les atypies des cellules glandulaires
=> *peut-être difficile pour les cytologistes*



Informer le cytologiste du contexte de grossesse

COLPOSCOPIE

Premier trimestre : modifications réduites, ne gênent pas la colposcopie



Début de grossesse - IARC 2025

Deuxième et troisième trimestre : modifications cervicales plus importantes

Aspects particuliers :

- **décidualisation** : peut former un bourgeon blanchâtre suspect (*acidophile, iodonégatif*)
- **ulcération** : acidophile, tâche rouge surélevée (*iodonégative*) à contours flous acidophiles
- **hypervascularisation** : exagération de la réaction acidophile et surtout aspect pseudo-anarchique des vaisseaux
- **polypes muqueux fréquents**
- **oedème, inflammation**



20SA - IARC 2025

La colposcopie a donc tendance à surestimer la gravité des lésions : risque de surdiagnostic

- réaliser la colposcopie par un expert
- corrélation colpo/biopsie reste excellente (73-95%)

But de la colposcopie pendant la grossesse : éliminer un contingent infiltrant

DÉPISTAGE PENDANT LA GROSSESSE

En France

Même modalités qu'en dehors de la grossesse:

Si la patiente n'est pas à jour, réalisation du frottis avant la fin du 3ème mois :

- Avant 30 ans frottis (cytologie)
- Après 30 ans test HPV

Moins de 30 ans :

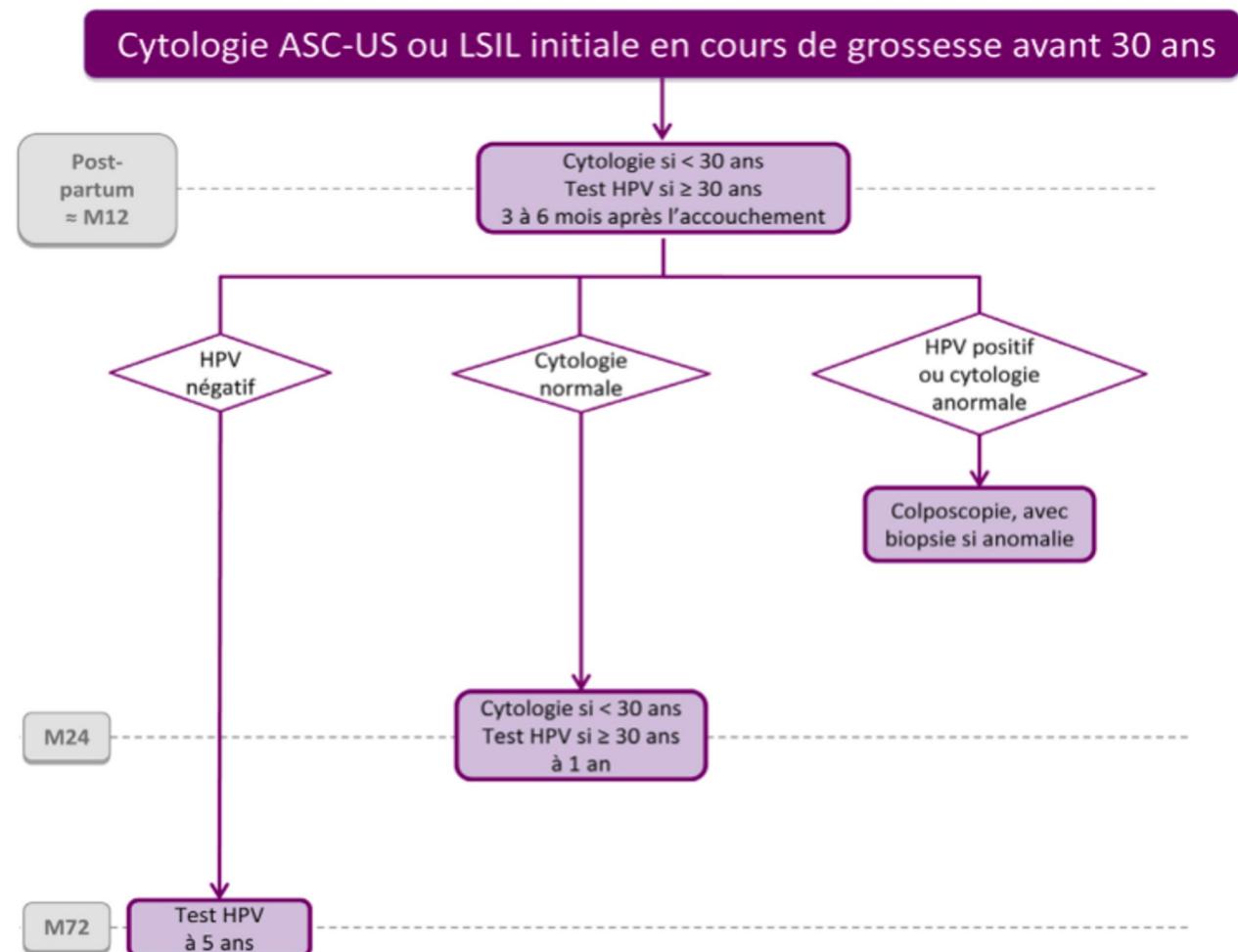


Fig. 11. Arbre 11 : Cytologie avec atypies des cellules malpighiennes de signification indéterminée (ASC-US) ou lésion malpighienne intra-épithéliale de bas grade (LSIL), initiale découverte en cours de grossesse avant 30 ans.

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Après 30 ans

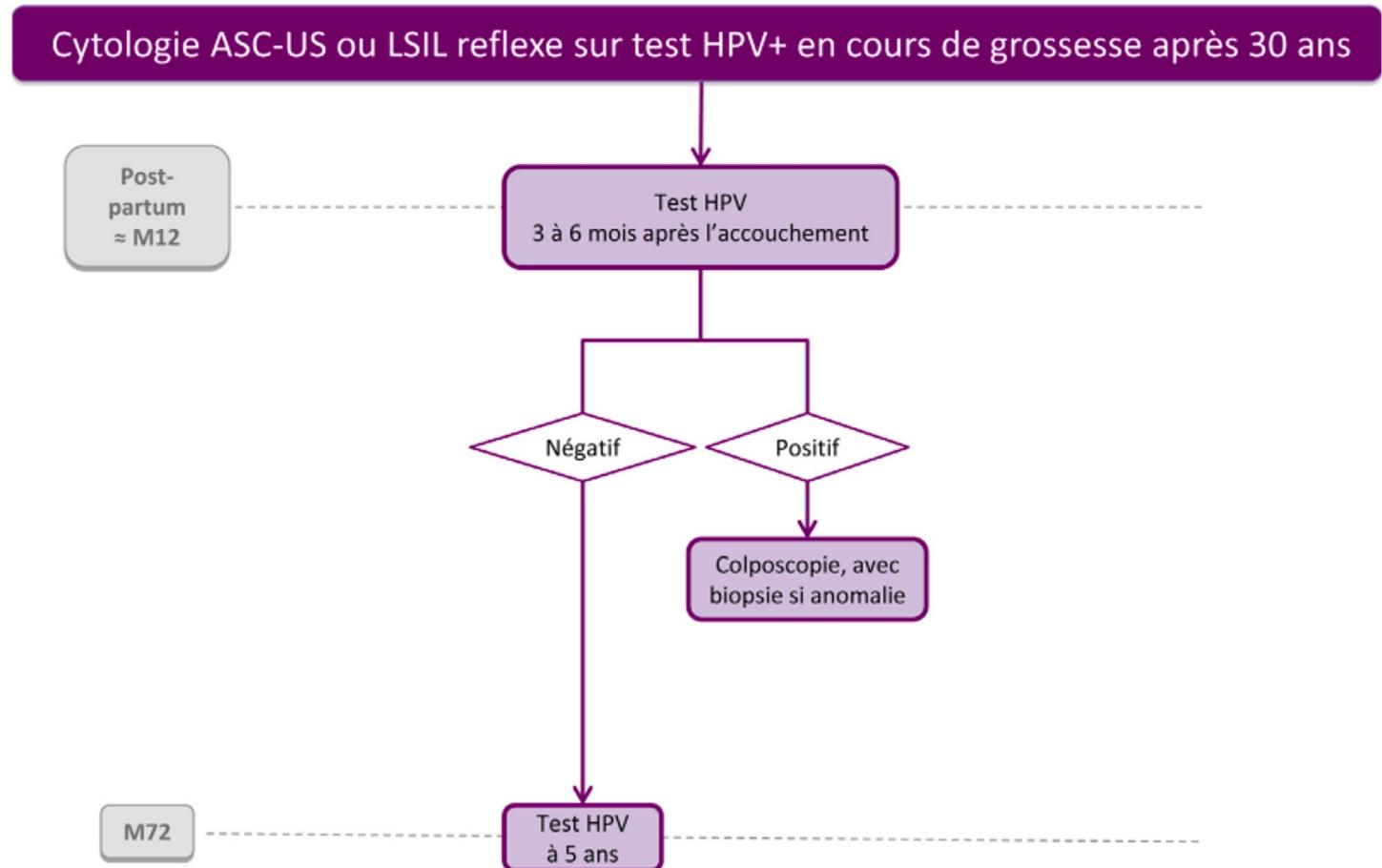
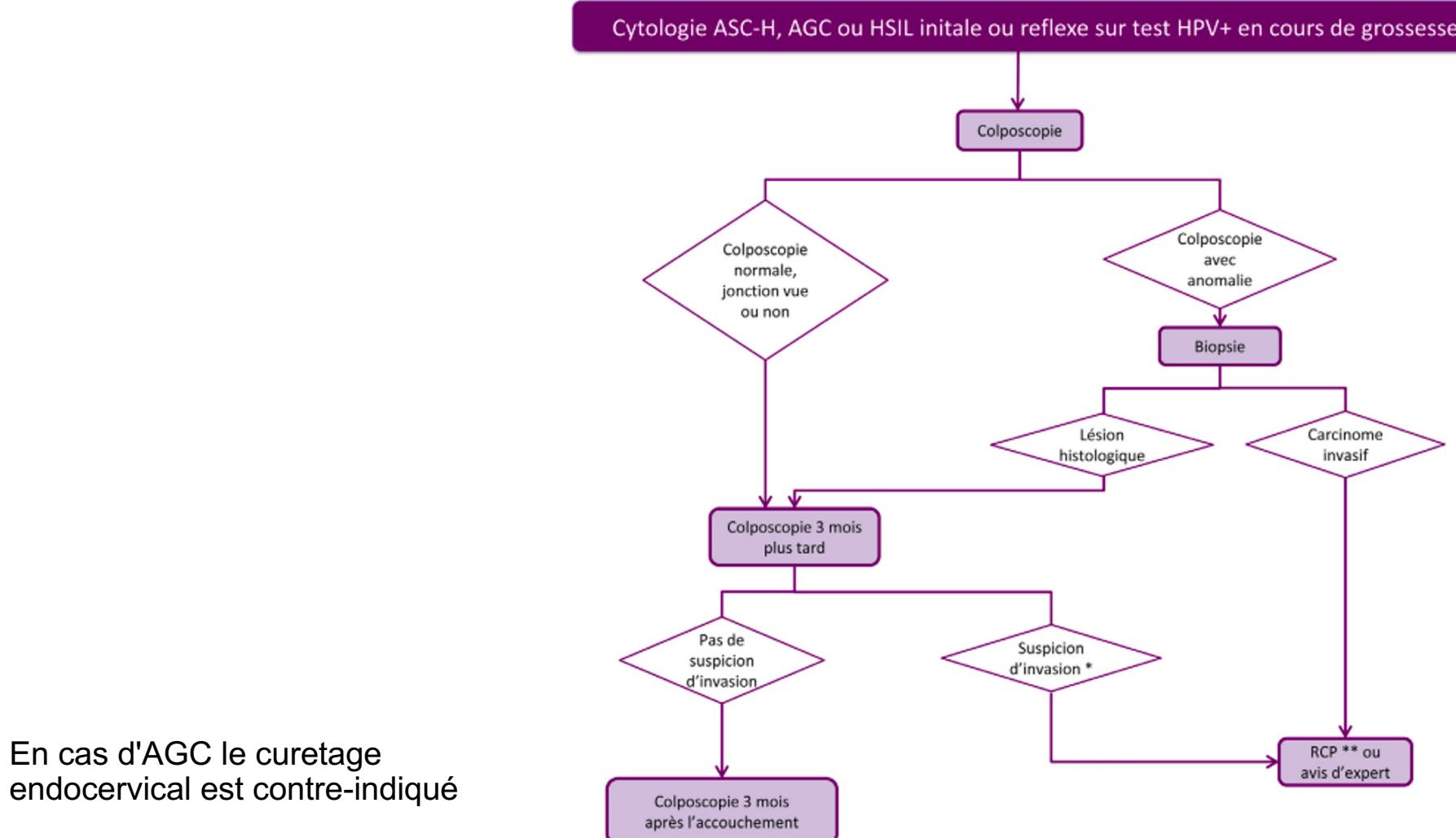


Fig. 12. Arbre 12 : Cytologie avec atypies des cellules malpighiennes de signification indéterminée (ASC-US) ou lésion malpighienne intra-épithéliale de bas grade (LSIL), reflexe sur test HPV positif découverte en cours de grossesse après 30 ans.

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* Il est recommandé de réaliser une nouvelle biopsie en cas de suspicion d'invasion.

** Réunion de concertation pluridisciplinaire

- In case of **ASC-H, HSIL and AGC** the triage by HPV testing or repeated cytology is **unacceptable**.
- **Biopsy can be done**, risk of hemorrhage or miscarriage seems to be safe during pregnancy (ASCCP)
- Le traitement sans preuve anapath est inacceptable (ASCCP)
- Quel que soit le résultat de la biopsie un **traitement n'est proposé qu'en cas d'invasion**. Prise en charge après RCP ou avis d'expert.
- **Pregnancy does not adversely impact the prognosis of patients with cervical cancer** (ASCCP). If a pregnancy is a risk factor for development of cervical cancer or not is a question which remains unanswered for the moment (ASCCP)
- It is considered unacceptable to base diagnosis and colposcopic assessments of CIN without biopsy. If any doubts of invasive cancer biopsy should be performed

- **Cytologic and colposcopy exams should be performed at birth visits (ASCCP)**
- If the cytological or colposcopic diagnosis changes to a more severe degree of abnormality -> directed punch biopsy
- If stable : patient seen after **3 months postpartum** for a definitive diagnosis by biopsy
- **Natural delivery is allowed if CIS or CIN**
- The cervix should be **completely involuted and or healed before re colposcopy**

Table 2. Comparison of cervical screening recommendations for pregnant women issued by PSGO, RCOG, ESGO, ACOG, SOGC and RANZCOG

Organization	Routine screening	Abnormal results	Colposcopy	Biopsy	Follow-up for high-grade lesions	Postpartum follow-up
PSGO (Poland)	Recommended during the first prenatal visit if not screened in the last 6 months	Colposcopy recommended; biopsy only if a strong suspicion of carcinoma	Safe during pregnancy	Performed if HSIL or cancer suspected	Close monitoring every 6–12 weeks with colposcopy and cytology	Follow-up within 6–12 weeks postpartum
RCOG (UK)	Deferred until 3 months postpartum unless specific indications occur	Colposcopy recommended; biopsy if high-grade lesions suspected	Safe during pregnancy	Performed if HSIL or cancer suspected	Regular monitoring with colposcopy and cytology until delivery	Follow-up typically within 3 months
ESGO (Europe)	Routine cytology as per national guidelines; consider timing during prenatal visits	Colposcopy recommended; biopsy if high-grade lesions suspected	Safe during pregnancy	Performed only if strongly indicated	Close monitoring every 8–12 weeks with colposcopy and cytology	Follow national postpartum guidelines, typically 6–12 weeks postpartum
ACOG (USA)	Perform if due for screening based on age/history; typically deferred to the postpartum period if recent	Colposcopy recommended; biopsy if high-grade lesions suspected	Safe during pregnancy	Performed if HSIL or cancer suspected	Close monitoring every 12–24 weeks with colposcopy and cytology	Follow-up colposcopy and cytology within 6–12 weeks postpartum
SOGC (Canada)	Continue cytology screening according to general guidelines; recommended if indicated	Colposcopy recommended if HSIL, ASC-H or AGC	Safe during pregnancy	Performed if HSIL (CIN3) or cancer suspected	Regular monitoring with colposcopy and cytology until delivery	Follow-up typically within 3 months
RANZCOG (Australia and New Zealand)	Cervical screening can be performed at any time during pregnancy if due	Colposcopy recommended; conservative management of HSIL during pregnancy	Safe during pregnancy	Performed only if invasive disease suspected	Close monitoring with colposcopy every 3–4 months	Follow-up (colposcopy and/or HPV test and reflex LBC if necessary) 6 weeks postpartum, preferably at 3 months

ACOG — American College of Obstetricians and Gynecologists, AGC — atypical glandular cells, ASC-H — atypical squamous cells, cannot exclude HSIL, CIN3 — cervical intraepithelial neoplasia grade 3, ESGO — European Society of Gynaecological Oncology, HPV — human papillomavirus, HSIL — high-grade squamous intraepithelial lesion, LBC — liquid-based cytology, PSGO — Polish Society of Gynecologists and Obstetricians, RANZCOG — Royal Australian and New Zealand College of Obstetricians and Gynaecologists, RCOG — Royal College of Obstetricians and Gynaecologists, SOGC — Society of Obstetricians and Gynaecologists of Canada

ESGO/SEGO/ESGA/ESP

Routine cervical screening during pregnancy is not recommended.
The guidelines suggest performing cervical cytology after delivery unless there are specific indications that warrant an immediate evolution pap smear after 6 -12 weeks postpartum.

Royal College of Obstetrics and Gynecology (RCOG)

Recommended **postpartum routine** screening **around 12 weeks postpartum**; unless patient with abnormal smear test results, then proceed with the test : the most suitable time between 3 and 6 months of pregnancy.

American College of gynecology obstetrics (ACOG) / (ASCCP) 2019

If routine pap smear -> usually could be **shifted until postpartum** unless specific concerns about previous results requiring prompt supervising.

Canada (SOGC)

If a woman is **due for pap test or DNA HPV screen during her pregnancy**, it is advisable to proceed with the test.

Royal Australian and New Zealand college of OB-GYN (RANZCOG)

Should be **scheduled in routine antenatal care** regardless if it's due or overdue.

HPV + , LSIL : repeat HPV testing after 12 months

HPV +, HSIL, AGC : colposcopy

Follow-up colposcopy and cytology every 6-12 months

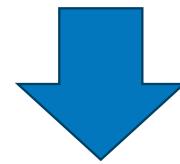
ASCCP 2019

- Patients with **HSIL (CIN2/3) or AIS** during pregnancy should undergo **surveillance via colposcopy AND age based testing cytology/HPV testing every 12-24 weeks**
- Since referral and colposcopic diagnosis usually occur near the midpoint of pregnancy, high grade CIN is suspected maybe reviewed at about 28 weeks
- The choice of interval is individualized based on the GA, level of experience of colposcopist and risk of loss of follow-up
- Repeat biopsy is recommended if the lesion worsens or invasion is suspected
- **Deferring colposcopy to post partum is acceptable**

HSIL (CIN2/3) or AIS



colposcopy + cytology/HPV testing
every 12-24 weeks*



Biopsy if the lesion worsens or invasion suspected

*Defer repeat colposcopy to post partum is acceptable

CANCER INVASIF

- IRM
- PET-SCAN discuté au cas par cas
- RCP ou avis d'expert : plan de traitement individuel

16.4 Guidelines



Every patient diagnosed with CCIP must be counseled by a multidisciplinary team. This team should consist of experts in the fields of gynecologic oncology, neonatology, obstetrics, anesthesiology, radiation oncology, medical oncology, psychooncology, and, if requested, theology or ethics.



Given the large spectrum of described therapeutic options, the multidisciplinary team recommends an individual consensual treatment plan according to patient's intention, tumor stage, and gestational age of pregnancy at cancer diagnosis. Primary aims of recommended treatment plan are oncological safety of the pregnant woman, as well as survival without additional morbidity of the fetus.



Treatment of patients with CCIP should exclusively be done in gynecologic oncology centers associated with a highest level perinatal center with expertise in all aspects of oncologic therapy in pregnancy and intensive medical care of premature neonates. Because of the low incidence of CCIP, centralization in a few well-equipped facilities is compulsory.



Besides clinical examination and histologic verification of invasive cervical cancer, preferred imaging modalities for clinical staging in patients with CCIP include MRI or expert ultrasound. Because of limited experience and inherent radioactivity PET-CT (PET-MRI) should be indicated only under very selected circumstances.



Tumor involvement of suspicious nodes should be verified histologically because of its prognostic significance and the impact on the management up to 24th week of gestation (fetal viability), preferably by minimally invasive approach.



Depending on tumor stage and gestational week of pregnancy, the following treatment options have to be discussed with the patient including risks and benefits of individual approaches:

- Adapted surgery including removal of the tumor: conization, trachelectomy, and lymph node staging (see above) according to the stage of the disease with the intent to preserve the pregnancy.
- Radical surgery or definitive chemoradiation as recommended for the stage of the disease without preservation of the pregnancy, with or without previous pregnancy termination.
- Delay of oncological treatment until fetal maturity (if possible > 32 weeks of gestation) and beginning of cancer-specific treatment immediately after delivery by cesarean section.
- Chemotherapy until fetal maturity and beginning of cancer specific treatment immediately after delivery by cesarean section. Treatment after delivery must consider application of previous chemotherapy. In patients with locally advanced stage or with residual tumor after conization that cannot be completely excised (risk of premature rupture of membranes (PROM) and/or cervical insufficiency), platinum-based chemotherapy can be considered starting earliest at 14 weeks of gestation.



Spontaneous delivery seems to have negative prognostic impact in patients with CCIP. Thus, cesarean section after the 32nd week of gestation (if possible) is the recommended mode of delivery. At the time of or following cesarean section, definitive stage-adjusted oncologic therapy has to be performed corresponding to that of nonpregnant women, taking into account therapy that has already been given during pregnancy.

MODE D'ACCOUCHEMENT

- Accouchement par voie basse : lésion de haut grade (CIN2/3) ou carcinome in situ autorisé.
- Césarienne si cancer invasif

D

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ESGO

EVOLUTION DES LÉSIONS

Stabilité ou régression des lésions (entre 0 et 69%)

Progressions rares <5%

→ Rassurer la patiente

- Justifie la surveillance des lésions de haut grade et report de prise en charge après l'accouchement

Post Partum Frottis perpartum (n = 615)	Normalisation %	CIN1 . ASC / L-SIL %	CIN2 & 3 / H-SIL %	Cancer %
ASC-US / L-SIL	64	29	6	0 (1 CCU μinvasif à 15 mois)
H-SIL	53	16	31	0

Florence Nicolas, et al. 37ème congrès de la SFCCV Paris, 17&18 Janvier 2014

- Reportez la surveillance des lésions de bas grade après l'accouchement

TAKE HOME MESSAGES

- Pas de traitement antepartum sauf cancer invasif quelque soit le terme.
- LSIL/ ASCUS : différer la surveillance en postpartum
- HSIL, AGC, ASC-H : colposcopie et biopsie en cas d'anomalie
- Si pas d'invasion, surveillance colposcopique
- Surveillance post partum indispensable
- Rassurer la patiente car faible risque de progression

**MERCI POUR
VOTRE ATTENTION**

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