



Self-sampling as alternative/additional strategy in France

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Summary

- Overview of the situation in France
- What is the place of self-sampling in cervical cancer screening?
- Proposal of vaginal self-sampling as an alternative in France
- What is the place of urine self-sampling?
- Conclusions

DÉPISTAGE DU CANCER DU
COL DE L'UTÉRUS
POUR TOUTES LES FEMMES DE 25 À 65 ANS



Overview of the situation in France

Cervical cancer epidemiology

- Cervical cancer (CC) screening over the last 50 years has significantly **reduced** the **incidence and mortality** associated with
 - Decrease attributed to the **widespread use of CC screening** with a **Pap smear**
- 12th highest cancer of the woman in France
 - ❖ 2,900 new cases / year
 - ❖ 1100 deaths / year

Overview of the situation in France

Cervical cancer screening

- Regular screening should reduce the incidence by more than **90%**
- Unsatisfactory screening coverage in France (55-60%)

Overview of the situation in France

Why? Barriers to women's participation?

- Various barriers:
 - ❖ fear for the speculum examination
 - ❖ discomfort with the gynaecological examination
 - ❖ a previous negative experience
 - ❖ unequal access to gynaecological follow-up
 - ❖ time constraints
 - ❖ fear of the result and treatments
 - ❖ low perceived risk of CC

Overview of the situation in France

3rd French Cancer Plan (2014-2019)

- Extend **organized cervical cancer screening** (piloted in 13 departments including the Maine et Loire)
- Objectives:
 - ❖ to reduce incidence and mortality by **30% in 10 years**
 - ❖ To achieve **80% screening coverage** and to make screening more accessible to vulnerable populations



Overview of the situation in France

How to increase CC screening coverage in France?

■ HPV test as the first screening intention



■ National organized screening program



■ HPV self-sampling



What is the place of self-sampling in cervical cancer screening?



Detecting cervical precancer and reaching underscreened women by using HPV testing on self samples: updated meta-analyses

Marc Arbyn,¹ Sara B Smith,² Sarah Temin,³ Farhana Sultana,^{4,5} Philip Castle,^{2,6} on behalf of the Collaboration on Self-Sampling and HPV Testing

- **Sending self-sampling kits** are **more effective to reach under-screened populations** compared to *conventional invitations* to have a screening specimen taken by a clinician
- **Opt-in strategies** where women had to request a self sampling kit were generally **not more effective** than invitation letters
- **Offering self sampling kits** generally **is more effective** in reaching under-screened women than sending invitations

Proposal of vaginal self-sampling as an alternative in France

■ *Performance of vaginal self-sampling*

HPV DNA testing on a self-taken vaginal sample is **as accurate to detect cervical precancer** as HPV testing on a clinician-taken sample

■ *French study offering vaginal self-sampling at home in France*

Vaginal self-sampling is **a cost-effective way to increase participation** in a cervical cancer screening program

Proposal of vaginal self-sampling as an alternative in France

- Since 2019: vaginal self-sampling should be **offered** to women who are not regularly screened in France

- Self-sampling kit **available from medical laboratories** in France

What is the place of urine self-sampling?

- Benefits of urine: **less invasive** and might be even **more acceptable**
- Performances of urine sample:
 - Pathak's meta-analysis: **excellent sensitivity** and **specificity** for the HPV detection in urine
 - Better sensitivity on the **first stream urine**
 - Excellent sensitivity in predicting lesions \geq **Cervical intraepithelial neoplasia 2**

Pathak et al., BMJ 2014
Arbyn et al., Lancet Oncol 2014 ; Cuzick et al., CEBP 2017 ; Leeman et al., BJOG 2017 ;
Stanczuk et al., BMJ 2016

What is the place of urine self-sampling?

- Experience feedback in the Maine et Loire department (France): HPV urinary test as an alternative method for women reluctant to cervical smear

CapU 1 & 2 studies

- ❖ 5000 patientes (40-65 ans)
- ❖ who did not undergo a Pap-smear during the last 3 years

Journal of Infection (2015) 71, 377–384

Home-based urinary HPV DNA testing in women who do not attend cervical cancer screening clinics



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What is the place of urine self-sampling?

- **CapU3 study:** To offer urinary HPV testing as an alternative method to **13,535 women** aged 35-65

13,535 letters were sent to propose urinary HPV test



Self-sampling at home

- **Inclusion criteria:**

- ❖ Living in the Maine et Loire region (West region), France
- ❖ Who had not had a cervical smear over the past 7 years and after 4 reminders

Comment réaliser votre prélèvement d'urine ?

Etape 1 : vérifier le contenu de l'enveloppe

1 flacon de prélèvement
Vérifier vos nom, prénom, et date de naissance sur l'étiquette collée sur le flacon

1 lettre d'information que vous devez **LIRE**
1 formulaire de consentement que vous devez **SIGNER**

1 enveloppe à bulles

1 enveloppe à bulle
1 enveloppe T adressée au CHU

Etape 2 : faire le prélèvement d'urine selon les recommandations suivantes

- 1 Laver soigneusement vos mains
Remplir le flacon avec le 1er jet de vos urines du matin.
Essuyer soigneusement le flacon et bien visser le bouchon.
- 2 Indiquez la date du prélèvement sur l'étiquette collée sur le flacon propre et sec
- 3 Mettre le FLACON REMPLI dans l'enveloppe à bulles. Insérer l'enveloppe à bulles dans l'enveloppe T
- 4 Joindre le consentement signé puis fermer l'enveloppe T
- 5 Adresser le tout au laboratoire de virologie du CHU d'Angers par voie postale

⚠ : Evitez les envois le dimanche et jour férié. Au besoin, garder le tube d'urine au réfrigérateur avant l'envoi si celui-ci est reporté au lendemain (Pour toutes questions concernant le mode opératoire ou erreur sur l'étiquette, contactez le Dr Ducancelle au 02.41.35.54.35).

TEST GRATUIT. SVP, ENVOYEZ VOTRE PRELEVEMENT AVANT LE

What is the place of urine self-sampling?

■ CapU3 study: results

→ Response rate: 18.5 %

- 13,535 letters sent / 2,394 samples received

→ After applying exclusion criteria: 15.4 %

- 1,915 patients were included

→ Good gynecological follow-up after a positive urinary HPV testing (92.1 %)

Conclusions about self-sampling

■ Self-sampling in France

- ❖ A tool to **better compliance** of women and to improve acceptability
- ❖ **Additional strategy** to organized screening program in France
- ❖ **Vaginal self-sampling** as an alternative (since 2019)
- ❖ **Urine self-sampling ?**
- ❖ **Sending at home** may generate higher participation rates
- ❖ Cancer Plan 2021-2025:
 - To achieve **70% screening coverage**
 - **Evaluation** of self-testing devices
- ❖ Reduced costs for the health care organization



Thank you for your attention



- Virology Laboratory Team
- UPRES EA 3859, Université d'Angers
 - Pr A. Ducancelle
 - Dr A. Pivert



- CRCDC Pays de la Loire team:

- Dr A.S. Le Duc Banaszuk



- Other collaborators:

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