



病人教育

產前診斷診所



絨毛膜採樣

幫助您瞭解採樣術及同意書

► 在閱讀和簽署“UH0173 程序化治療特別同意書”之前，請先閱讀本手冊。

本手冊介紹了絨毛膜採樣 (CVS) 的情況，包括其好處、風險、併發症和替代方法。

本手冊是作為您與您的醫生所作談話的補充。您必須完全瞭解手冊的內容，這是至關重要的。所以，請務必仔細閱讀。

什麼是絨毛膜採樣？

絨毛膜採樣 (CVS) 是一種用於對胎兒進行檢測，以發現多種健康問題的方法。CVS 在懷孕的頭三個月中進行，通常是在 11~14 周內。在檢測中，將取出少量絨膜絨毛作為樣本。絨膜絨毛是胎盤中生出的細小指狀絨毛，絨毛中的遺傳物質與正在發育的胎兒體內的遺傳物質通常是相同的。所以，絨毛可以用來作基因檢測。

CVS 如何進行？

- 首先，使用超聲波觀察胎兒的位置，以決定進行 CVS 的最安全方法。整個過程不到 5 分鐘，在此期間保使用持超聲波。
 - 如果胎盤距離脊柱較近，醫生會經宮頸插入一根很細的空管，亦稱導管。這稱為經宮頸 CVS。
 - 如果胎盤距離腹部較近，醫生會將一根細針插入您的腹部。這稱為經腹部 CVS。
- 然後，醫生邊透過超聲波觀察胎兒，邊將導管或針引向胎盤。
- 取出少量絨毛。
- 在做 CVS 的過程中，您可以由您的伴侶、配偶、朋友或家人陪伴。
- 做完 CVS 後，您將被送到實驗室抽血，做母細胞感染測試（見第 2 頁左側的內容）。

CVS 檢測能夠發現什麼？

檢測染色體，以診斷唐氏綜合症和三性體 18 等疾病。如果家族中有囊腫性纖維化或肌肉萎縮症這類遺傳病，可通過檢測 DNA 來確定胎兒是否遺傳了這些疾病。

解釋 CVS 結果可能會比較困難。在大約 1%~2%（每 100 個當中有 1~2）的個案中，檢測結果顯示出部分細胞是正常的，部分細胞則異常。這種現象叫作鑲嵌。可抽羊水來診斷這種鑲嵌現象是否也影響到胎兒，還是僅僅影響到胎盤。

如果染色體測試結果正常並顯示胎兒為女性，可進行另一項檢測，以確保結果所反映的是胎兒的染色體，而不是母親的染色體。如果第二次檢測表明存在母細胞污染，可再次進行 CVS，或者可以抽羊水進行診斷。

完成對 CVS 樣本的全部檢測最多需要 3 周時間。

將使用哪些藥物？

開始前，醫生將使用殺菌皂來清潔您的子宮頸或腹部。

如果您的血型是 Rh 陰性，在進行 CVS 之後將給您注射 RhoGAM，以防止今後懷孕時發生問題。

CVS 有哪些好處？

1. CVS 能夠對某些健康問題作出明確的診斷。有些人認為，瞭解診斷總好過對自己胎兒的健康狀況心中無數。
2. 多數情況下，檢測結果都是正常的。如果您對自己胎兒的健康感到擔心，檢測結果正常或許會令您對自己的懷孕情況感覺更好。
3. 有些婦女認為，瞭解多些胎兒的健康情況，將幫助她們為嬰兒的到來作更好的準備。而有些婦女則不想養育有特殊需要的子女。透過診斷，可使父母能夠作出選擇，例如選擇領養或中止妊娠。

CVS 有哪些風險和併發症？

醫生會採取措施把 CVS 的風險降到最低，但是沒有哪種手術是完全沒有風險的。

CVS 的主要風險是流產。如果發生宮內感染，或胎盤從子宮脫出，或包圍胎兒的液囊在 CVS 之後未能愈合而導致羊水外流，都可能造成流產。

若不做 CVS，大約有 2% ~ 3%（每 100 個當中有 2~3 個）懷孕婦女在 8~14 周期間內會流產。CVS 增加了 1%（每 100 人當中有 1 人）的流產風險。換句話說，每 100 個接受 CVS 的婦女中，有 99 人（99%）不會流產。

CVS 的早期研究結果令人擔心它會增加手指和腳趾出生缺陷的風險。但如果是在懷孕 10 周後進行 CVS，則不會增加此類風險。

CVS 存在一些局限性：

- CVS 診斷不出大腦和脊椎疾病，例如脊柱裂。許多健康問題和出生缺陷是任何產前檢測都診斷不出來的。所以，CVS 檢測結果正常並不能保證胎兒就是健康的（見本頁左側的內容）。

進行 CVS 後通常會出現哪些情況？

- 有時，在最初幾個小時內會有輕微的像是來月經似的腹痛（您可以服用 Tylenol 來止痛）。
- 進行經宮頸 CVS 後，可能會出現一些淡斑。在這些淡斑消除之前，切勿同房、沖洗陰道，或用月經棉塞。
- 進行經腹部 CVS 後，插針部位的皮膚可能出現青瘀或疼痛。
- 在腹痛和淡斑消除之前，切勿進行正常的日常活動。

- 並不總是能夠取出絨毛的。醫生有時會做第二次嘗試。如果第二次嘗試也無效，會將您的 CVS 改期進行。
- 有時，由於從 CVS 收集到的細胞不生長，致使實驗室不能檢查胎兒的染色體。這種情況發生的概率低於 0.1%（不到千分之一）。
- 有時，對染色體的分析不能達到通常的詳盡程度。這種情況發生的概率為 5% 左右（即 20 例個案中有 1 例）。這時，仍然可以發現染色體的較大改變，但較小的改變可能會被忽略。

CVS 有哪些替代方法？

您可以決定不做 CVS。是否做 CVS 完全由您自己選擇和決定。能夠透過 CVS 診斷出的健康問題也可以在嬰兒出生後被診斷出來。

有些婦女認為健康問題的風險很小，因此不當回事。有些婦女不想冒流產的風險，寧願在嬰兒出生後再去診斷。有些家庭認為能夠為有特殊健康需要的嬰兒的出生做好準備，而無需去做診斷。

如果您想在懷孕期間做另一種診斷檢測，即在 16~22 周內做羊水測試。

需要哪些後續護理？

CVS 應該不會產生不良後果。您可以重返工作崗位，只要您的工作無需繁重的體力活動。

在 CVS 後 24~48 小時，我們建議您：

- 盡可能不要走動。
- 喝多些液體。

此外還應避免：

- 劇烈活動，例如跑步或其他鍛煉。
- 提重物（10 磅以上）。
- 同房或性活動。

有任何問題嗎？

您的問題很重要。如果您對 CVS 或其風險、好處、替代方法有任何問題，應該在簽署任何同意書之前向您的醫生諮詢。

產前診斷診所：
206-598-8130

母嬰護理診所：
206-598-4070

何時給醫生打電話

如果在做 CVS 後出現以下任何症狀，應立即打電話給您的醫生：

- 陰道出血。
- 下腹部劇烈或間歇痙攣或疼痛。
- 有明液體從陰道流出。
- 發燒或發冷。
- 腹瀉。
- 出現類似流感的症狀。

UNIVERSITY OF WASHINGTON
MEDICAL CENTER
UW Medicine

Maternal and Infant Care Clinic
Box 356159
1959 N.E. Pacific St. Seattle, WA 98195
206-598-4070



Chorionic Villus Sampling

Helping you understand your procedure and the consent form

► Please read this handout before reading and signing the form “Special Consent for Procedural Treatment UH0173.”

This handout describes what to expect from chorionic villus sampling (CVS). Included are benefits, risks and complications, and alternatives.

This handout is in addition to the talks you have with your health care providers. It is important that you fully understand this information, so please read these pages carefully.

What is chorionic villus sampling?

Chorionic villus sampling (CVS) is a procedure that allows your baby to be tested for a variety of health problems. CVS is done during the first trimester of pregnancy, usually between 11 and 14 weeks. During the test, a small sample of *chorionic villi* is taken. Chorionic villi are tiny finger-shaped growths found in the placenta. The genetic material in the villi is usually the same as that in the developing baby, so the villi can be used for genetic testing.

How is CVS done?

- First, *ultrasound* is used to see your baby’s position and to decide the safest way to do the CVS. The ultrasound stays on during the entire procedure, which takes less than 5 minutes.
 - If the placenta is closer to your spine, the doctor inserts a thin hollow tube, called a *catheter*, through the cervix. This is called a *transcervical CVS*.
 - If the placenta is closer to your belly, the doctor inserts a thin needle into your abdomen. This is called a *transabdominal CVS*.
- Then, while watching the baby by ultrasound, the doctor guides the catheter or needle to the placenta.
- A small amount of villi is removed.
- You are welcome to have a partner, spouse, friend, or family member with you during your CVS.
- You will be sent to the lab to have your blood drawn afterward for *maternal cell contamination tests* (see the information on the left side of page 2).

What can CVS test for?

The chromosomes are examined, which will diagnose conditions such as *Down syndrome* and *trisomy 18*. If a hereditary condition such as cystic fibrosis or muscular dystrophy runs in the family, the DNA can be tested to see if the baby has inherited the disorder.

Interpreting CVS results can be difficult. In about 1% to 2% (1 to 2 out of 100) of cases, the results show a mixture of some normal cells and some abnormal cells. This is called *mosaicism*. An amniocentesis can be done to see if the mosaicism also affects the baby, or just the placenta.

If the chromosome results are normal and show that the baby is female, another test is done to be sure the results represent the baby's chromosomes, not the mother's. If that second test shows maternal cell contamination, the CVS can be repeated, or an amniocentesis can be done.

It may take up to 3 weeks to complete testing of the samples taken during your CVS.

What medicines will be used?

The doctor will use an *antiseptic soap* to clean your cervix or your abdomen before the procedure is done.

If your blood type is Rh negative, you will be given a *RhoGAM injection* after the CVS to prevent problems in future pregnancies.

What are the benefits of CVS?

1. CVS allows a clear diagnosis of some health problems. Some people find that knowing a diagnosis is better than being unsure about their baby's health.
2. Most of the time, test results are normal. If you have been worried about your baby's health, normal test results may make you feel better about your pregnancy.
3. Some women feel that having more information about the baby's health will help them prepare better for the baby's arrival. Others do not want to raise a child with special needs. Having a diagnosis allows parents to make choices, such as choosing an adoption plan or stopping the pregnancy.

What are the risks and complications of CVS?

The doctor will take steps to make the risks of the CVS as low as possible, but no procedure is completely risk-free.

The major risk from CVS is miscarriage. A miscarriage may occur if an infection starts in the uterus, if the placenta separates from the uterus, or if the sac surrounding the baby doesn't heal after the procedure, allowing amniotic fluid to leak out.

Without CVS, about 2% to 3% (2 to 3 out of 100) of pregnancies will miscarry between 8 and 14 weeks. CVS adds an extra 1% (1 out of 100) risk of miscarriage. Said another way, out of every 100 CVS procedures done, 99 women (99%) do **not** have a miscarriage.

Early studies of CVS raised the concern that it increases the risk of birth defects of the fingers and toes. This risk is not increased if a CVS is done after 10 weeks of pregnancy.

There are some limitations to CVS:

- Conditions of the brain and spine, such as *spina bifida*, are not diagnosed by CVS. Many health problems and birth defects cannot be diagnosed by **any** prenatal tests. Having normal test results from CVS does not guarantee the baby is healthy (see information on the left side of this page).

What is normal to experience after a CVS?

- Sometimes there will be mild, menstrual-like cramping for the first few hours (you can take Tylenol for this).
- After a transcervical CVS, light spotting may occur. Do not have sexual intercourse, douche, or use tampons until the spotting has stopped.
- After a transabdominal CVS, there may be bruising or soreness on your skin where the needle was inserted.
- Do NOT do normal daily activities until any cramping and spotting have stopped.

- It is not always possible to obtain villi. Sometimes the doctor can try a second time. If the second try doesn't work, your CVS will be rescheduled for another time.
- Sometimes the lab is not able to examine the baby's chromosomes because cells collected from the CVS do not grow. This happens less than 0.1% of the time (less than 1 out of 1,000 times).
- Sometimes the chromosomes cannot be analyzed with as much detail as usual. This happens in about 5% (1 out of 20) of cases. Large changes in the chromosomes will still be seen. But, smaller changes may be missed.

What are the alternatives to CVS?

You may decide not to have a CVS. Doing a CVS is your choice, and the decision is a personal one. Health problems that can be diagnosed by CVS can also be diagnosed when the baby is born.

Some women feel the risk of a health problem is so low that they are not concerned. Others decide they don't want to risk a miscarriage and prefer to learn the diagnosis after the baby is born. Some families feel they can prepare for the birth of a child with special health needs without knowing a diagnosis.

If you want to have a different kind of diagnostic test during the pregnancy, an *amniocentesis* can be done between 16 and 22 weeks.

What follow-up care is needed?

There should be no ill effects from the CVS. You can return to work as long as your job does not require heavy physical activity.

For 24 to 48 hours after your CVS, we suggest that you:

- Stay off your feet as much as possible.
- Drink extra fluid.

Also avoid:

- Heavy physical activity, such as running or other exercise.
- Lifting heavy objects (10 pounds or more).
- Sexual intercourse or sexual activity.

Questions?

Your questions are important. If you have any questions about CVS or the risks, benefits, or alternatives to it, talk with your provider before signing any consent forms.

Prenatal Diagnosis
Clinic: 206-598-8130

Maternal and Infant Care
Clinic: 206-598-4070

When to Call Your Doctor

Call your health care provider right away if you have any of these symptoms after your CVS:

- Vaginal bleeding.
- Severe or rhythmic cramping or pain in the lower abdomen.
- Leakage of clear fluid from the vagina.
- Fever or chills.
- Diarrhea.
- Flu-like symptoms.

UNIVERSITY OF WASHINGTON
MEDICAL CENTER
UW Medicine

Maternal and Infant Care Clinic

Box 356159
1959 N.E. Pacific St. Seattle, WA 98195
206-598-4070