Chemotherapy and Hair Loss: A Guide to Scalp Cooling

For people with cancer getting intravenous (IV) chemotherapy treatment

Answers to common questions about scalp cooling such as:

• How does scalp cooling work ............................................. page 2
• How much hair will I keep..................................................... page 2
• How do I get scalp cooling at Princess Margaret .................... page 4
• How do I prepare for scalp cooling ...................................... page 4
• What is the cost of scalp cooling......................................... page 7

Patients of Princess Margaret Cancer Centre have the option of renting the Paxman Scalp Cooling system to use during their intravenous (IV) chemotherapy treatment.

Note: Scalp cooling is not covered by the Ontario Health Insurance Plan (OHIP). You will need to pay for scalp cooling in advance.

Not all chemotherapy causes hair loss. Talk with your health care team about whether the chemotherapy you will get is likely to result in hair loss.

This brochure provides general information for people thinking about trying scalp cooling during their chemotherapy treatment. For more information, visit the Paxman website: https://coldcap.com.
What is scalp cooling?
Scalp cooling is a way to help reduce hair loss caused by certain types of chemotherapy. A machine delivers a cold liquid into a cap fitted tightly on your head. The cap remains cold throughout your intravenous (IV) chemotherapy.

Who can use scalp cooling?
Scalp cooling can be used by people getting chemotherapy for solid cancer tumours like breast or lung. Scalp cooling is not approved for people with blood cancers like leukemia or lymphoma.
For more information on who should not have scalp cooling visit the Paxman website: https://paxmanscalpcooling.com/practice/considerations-and-safety

How does scalp cooling work?
Scalp cooling involves wearing a cap that cools the scalp (the skin that covers your head). The cooling is done before, during, and after chemotherapy treatment. The cooling cap lowers the temperature of the scalp. The lower temperature causes the blood vessels in the scalp to narrow.

When blood vessels narrow, less blood flows through them. Since chemotherapy travels through the blood, less chemotherapy reaches the hair follicles (hair follicles anchor hair into the skin on the scalp). With less chemotherapy in the follicles, hair may be less likely to fall out.

**Important:** Scalp cooling must start at your first chemotherapy appointment. If you want scalp cooling, you need to arrange this before your first treatment.

How much hair will I keep?
Even with scalp cooling, you will have shedding, thinning, and hair loss. Scalp cooling systems may not work for everyone. It is hard to predict how well scalp cooling will work for you.
A study of the Paxman system was done from 2014 to 2016 with 220 early-stage female breast cancer patients. The study found that 196 of 220 patients (or 9 in 10) getting taxane-based chemotherapy kept half or more of their hair.

Taxane-based chemotherapy includes:
- Paclitaxel
- Albumin-bound or nab-paclitaxel
- Docetaxel

For patients getting anthracycline-based chemotherapy, 103 of 220 patients (or 5 in 10) kept half or more of their hair.

Anthracycline-based chemotherapy includes:
- Doxorubicin
- Epirubicin
- Daunorubicin

How much hair you will keep depends on many factors like:
- the type of chemotherapy
- the dose (amount) of chemotherapy
- hair type (texture or thickness)
- how you react to scalp cooling (whether you find it too painful)
- how much hair you have to start with
- how healthy your hair is

Scalp cooling may not work as well on thick hair. This is because thick hair may not allow the cap to be close enough to the scalp to work as well.

Scalp cooling does not reduce the loss of other body hair, such as:
- eyelashes
- eyebrows
- pubic hair
How do I get scalp cooling at Princess Margaret?

When you meet with your doctor, they:

- talk to you about scalp cooling
- fill out the enrollment form if you decide to proceed with scalp cooling
- connect you with Paxman salesperson at Princess Margaret

The Paxman salesperson arranges to meet with you the same day to:

- discuss the scalp cooling treatment
- fit you for a cooling cap
- enrol you in the program

The contact information for Paxman is:
Email: canada@paxmanscalpcooling.com
Phone: 647 632 9625

How do I prepare for scalp cooling at my chemotherapy appointment?

To prepare for your appointment, please bring:

- a comfortable cotton or polyester headband
  It may help to protect your forehead from the cold.
- a towel to dry your hair
  You may feel cold while getting scalp cooling. Bring these items to your appointment to help keep you warmer.
- warm clothing (even in warm weather), including a neck scarf and hat or head coverings

Remember to bring your cooling cap. The cooling cap must fit tightly on your head.
Your Paxman technician will help prepare your hair and fit your scalp cooling cap to your head. If you have a comfortable cotton or polyester head band bring it with you. This band can be used to help protect your forehead from the cold. Also bring a towel to dry your hair.

To get the best results, the cooling cap must fit tightly on your head. The cap should fit along your hair line and there should be no gaps between the cap and your scalp.

Learn how to put the cap on before your first chemotherapy appointment. Try to practice putting your cap on a few times before treatment. For videos on how to prepare your hair and put on the cap, visit https://coldcap.com/support-guidance/tutorial-videos.

What can I expect when getting scalp cooling?

At your chemotherapy appointment, you will wear a cooling cap. The cooling cap will feel very cold when it is first put on. Most people get used to the coldness after 5 to 15 minutes. Many people have a numb feeling for most of the scalp cooling process.

The cooling cap is attached to a cooling machine. The machine pushes cold liquid through the cap while you wear it. On top of the cooling cap, you will wear an outer cover. This outer cover:

- protects the cooling cap from high room temperatures
- absorbs moisture
- ensures there is good contact between the cap and your scalp

A Paxman technician will connect your cooling cap to the cooling machine.
How long does scalp cooling take?
Your appointment time is longer when you do scalp cooling because of the extra time you need to sit with the cap on before and after your infusion.

There are 3 stages to scalp cooling (wearing the cap attached to the machine):
1. 30 minutes before your chemotherapy treatment
2. During your chemotherapy treatment (how long depends on the type of chemotherapy you get)
3. 30 to 90 minutes after treatment ends

What if I need to use the bathroom?
Try to use the bathroom before you get connected to the cooling machine. If you need to go to the bathroom, you can disconnect from the machine for up to 8 minutes. The system then begins to alert you to connect back to the machine. You need to keep the cooling cap and outer cap on when you use the bathroom.

If you go to the bathroom during the first cooling stage (before you start chemotherapy), you need to start the cooling stage again.

What are the side effects?
Some people have side effects, such as:

• chills
• dizziness
• headaches
• nausea (feeling like you are going to vomit)
• scalp pain
• sinus pain
Some people may have a headache and feel cold throughout the treatment. You may want to ask your health care team for pain medicine like acetaminophen (Tylenol).

For some people, the cap and chin straps can feel uncomfortable. There is a small risk that the cooling cap may irritate (make itchy and red) your scalp or forehead.

**What is the cost of scalp cooling?**
Scalp cooling treatments are not covered by OHIP. If you have a private health care plan, check with your insurance provider to see if scalp cooling is covered.

Below are the costs for scalp cooling treatment:

<table>
<thead>
<tr>
<th>Treatment 1</th>
<th>Treatment 2</th>
<th>Treatment 3</th>
<th>Treatment 4</th>
<th>Treatment 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$400</td>
<td>$400</td>
<td>$400</td>
<td>$400</td>
<td>$400</td>
</tr>
<tr>
<td>Treatment 6</td>
<td>Treatment 7</td>
<td>Treatment 8</td>
<td>Treatment 9</td>
<td>Treatment 10</td>
</tr>
<tr>
<td>$350</td>
<td>$350</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
</tbody>
</table>

The cost depends on how many cycles of chemotherapy you get. For example, if you are having 6 cycles of chemotherapy, you need 6 treatments of scalp cooling.

The most you will pay is $3000 for the 10 treatments. If you need more than 10 scalp cooling treatments, you do not have to pay for the extra treatments.

You will need to pay for cycle 1 of treatment on the day you enroll. Every other payment, by credit or debit card, can be paid on the day you get your scalp cooling treatment.

**Note:** The cooling cap is included in the cost.

**If you need help paying for scalp cooling, ask the Paxman salesperson if you qualify for help.**
Caring for your hair and head

Your hair needs special care during scalp cooling. Here are some tips on how to be gentle with your hair:

• Use a good quality hairbrush. A poor quality brush can tear and snag your hair.

• Avoid perms and colouring or dying your hair while getting chemotherapy. Chemotherapy makes your scalp very sensitive.

• Avoid using too much heat on your hair. Dry your hair gently and do not use hair straighteners.

• Wash your hair using warm water and a mild shampoo. When washing your hair, keep it straight. Never pile your hair on top of your head after you shampoo or condition your hair.

• After washing, use plenty of conditioner to help manage tangles. Use a detangling hairbrush or a wide-tooth comb. It also helps to hold the hair above the tangles so that it does not stress hair roots.

Not everyone has the same texture of hair. For more information, about hair care for different hair types, visit the Paxman haircare website: https://coldcaphaircare.com/what-is-my-hair-type

Before you try a scalp cooling system, talk to your doctor about your chemotherapy treatment and any other health issues.

To see how scalp cooling can help you based on the type and dose of your chemotherapy treatment visit: https://coldcap.com/cold-capping/decision-making-guide/

Have feedback about this document?
Please fill out our survey. Use this link: surveymonkey.com/r/uhn-pe

Visit www.uhnpatienteducation.ca for more health information. Contact pfep@uhn.ca to request this brochure in a different format, such as large print or electronic formats.

© 2021 University Health Network. All rights reserved. Use this material for your information only. It does not replace advice from your doctor or other health care professional. Do not use this information for diagnosis or treatment. Ask your health care provider for advice about a specific medical condition. You may print 1 copy of this brochure for non-commercial and personal use only.