Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Managing Hair Loss with Scalp Cooling During Chemotherapy for Solid Tumors

This information explains how scalp cooling (using a cold cap) during chemotherapy (chemo) may help reduce hair loss. It also gives some basic information about caring for your head and hair during chemo.

Hair loss related to chemo

Chemo works by attacking fast-growing cells. Cancer cells are fast growing, but so are other cells, such as hair cells. Chemo can cause hair loss on your scalp, eyebrows, eye lashes, arms, legs, and pubic area. Depending on your chemo, you can lose hair in none, some, or all these areas.

You may start to see your hair fall out 1 to 4 weeks after your first chemo treatment. How much of your hair falls out depends on:

- The type of chemo you get.
- The amount of chemo you get.
- How often you have chemo treatments.

Talk with your care team about how much hair loss to expect.

How quickly hair falls out also varies from person to person. The first signs of hair loss may be more hair on your pillow in the morning, in the shower, or when you brush your hair.

Once you finish chemo, your hair should start growing back. It can take 3 to 5 months for your hair to grow back. It may have a different texture, color, or

volume. For most people, hair grows in as fully as it was before chemo.

Reducing hair loss with scalp cooling

Scalp cooling is a way to reduce hair loss while you're getting chemo to treat solid tumors. Solid tumors are cancers that are not leukemia or lymphoma. Scalp cooling involves wearing a cold cap on your head before, during, and after getting chemo.

How well does scalp cooling work? Could I still lose my hair?

The amount of hair you're left with after scalp cooling depends on:

- How much hair you start with.
- How healthy your hair and scalp are before you start treatment.
- The type and dose of the chemo medication you're getting.

Use Paxman's Decision Making Guide (www.msk.org/pe/paxman-intro-scalp-cooling) to see how scalp cooling can help you based on the type and dose of your chemo treatment. For more information, talk with your healthcare provider.

Scalp cooling can work from 10% to 100% of the time. This makes it hard to predict how well scalp cooling will work for you. Most studies have found that people who use scalp cooling lose less hair and use head coverings or wigs less often than people who don't use scalp cooling.

Even with scalp cooling, it's normal to lose some hair soon after you start treatment. This is called shedding. Shedding may not result in complete hair loss. It may lessen as you keep using scalp cooling during your chemo treatment.

Even if you use one of the scalp cooling methods, there is no guarantee you will not lose a significant amount of hair.

Is scalp cooling hard to tolerate?

Most people can tolerate scalp cooling. About 30% to 50% of the time, people have side effects such as headaches, nausea (feeling like you're going to throw up), scalp pain, or feeling chilly. Some people also find the caps uncomfortably cold. A small number of people decide to stop using scalp cooling because of these side effects.

Are there any risks to doing scalp cooling?

There is a small risk of irritation on your scalp or forehead from cooling.

Some people worry about cancer cells traveling to the scalp and growing. Scalp cooling does not change the chance of this happening. With or without scalp cooling, the chance is very small.

How is scalp cooling done?

Scalp cooling is done by wearing a special cap on your head. There are 2 ways to cool your scalp:

- Using frozen cooling caps.
- Using a machine that continuously cools the cap.

Frozen cooling caps

There are many brands of frozen cooling caps, such as:

- The Chemo Cold Cap™ (www.chemocoldcaps.com)
- Penguin™ cap (www.penguincoldcaps.com)

You can rent these frozen cooling caps through the companies that make them. Your healthcare provider can give you more information about these products.

It's important for your scalp to stay at the same cold temperature before, during, and after your treatment. You will need to have multiple frozen caps for each chemo treatment so you can change them as they get warm. Follow each cap's guidelines for how many caps you will need and how long you should wear each one.

You will need to freeze all the caps ahead of time. Bring them to your chemo appointment in a cooler with dry ice. You will also need to bring someone to help you change your cold cap during your treatment. This can be a caregiver, friend, family member, or a hired trained "capper."

Cap attached to a cooling machine

MSK offers the Paxman Scalp Cooling System. This system works by attaching a cooling cap to a cooling machine. The machine pushes cold liquid through the cap while you're wearing it.

How to use the Paxman Scalp Cooling System

If you're interested in using the Paxman Scalp Cooling System, talk with your healthcare provider before your first chemo treatment. They will sign you up and give you the cooling cap and kit at your visit.

It's important to get ready for your scalp cooling treatment before your first appointment. You will need to get your hair ready and fit your cap on your head before your chemo. Your nurse will connect your cap to the cooling machine.

Watch the videos on the Paxman website (www.coldcap.com) to learn how to get ready for your Paxman scalp cooling treatment.

After you watch the videos, practice getting your hair ready and fitting your cap. You may need some help from a caregiver, friend, or family member. You may also bring someone to your appointment with you.

Remember to bring your cap and kit with you to your appointment.

How long does scalp cooling take during treatment?

Scalp cooling adds extra time before and after each of your chemo treatments. The extra time can range from 20 minutes to 90 minutes. The exact time depends on your treatment plan and the type of cooling cap you use.

After your treatment, you may need to finish your cooling session in another area outside the infusion unit. This frees up space for other people getting treatment. Your care team will tell you if you need to do this. It depends on your treatment plan and which MSK location you're at. Your care team will answer

any questions about cooling times and what to expect at your location.

If you use a frozen cooling cap, plan to finish your cooling session at home after your treatment. Examples of frozen cooling caps are the Penguin™ cap and the Chemo Cold Cap™.

How much does scalp cooling cost?

The cost of scalp cooling depends on the type of scalp cooling system you use and the number of treatments you need. If you would like information on the cost of frozen cooling caps, you can contact the company or look on their website.

There's some financial support available for scalp cooling from an organization called "Hair to Stay." Visit their website (www.hairtostay.org) to learn more.

The Paxman Scalp Cooling System

Enrolling in Paxman scalp cooling costs about $3,785. This covers the cost of the enrollment and fitting the cap. Once you have your scalp cooling kit, each scalp cooling session has an additional cost:

- **Pre-cooling treatment:** A flat fee of $194.
- **Post-cooling treatment:** The cost depends on how long your post-cooling session lasts. It can range from $68.60 to $203.93. To learn more about your post-cooling session time, talk with your care team.

These additional costs cover setting up the cap and using the cooling machines. Prices are subject to change. Patient Billing Services will contact you before your appointments to collect payment if your insurance does not cover scalp cooling.

Not all health insurance plans cover scalp cooling. We will contact your insurance company to find out if your plan covers scalp cooling before you start. This is called prior authorization. You can also contact Patient Billing Services at 646-227-3378 if you have questions about the cost of scalp cooling.

Paxman offers a patient assistance program (PAP) to help with the cost of scalp

cooling. You may be able to enroll in the PAP if:

- Your health insurance plan does not cover scalp cooling.
- Your health insurance plan only covers a small part of scalp cooling's cost.
- Your yearly income is below a certain amount.

A member of MSK's Patient Financial Services can contact you to see if you can enroll in the PAP. You can also visit Paxman's Billing and Reimbursement webpage (www.paxmanscalpcooling.com/access-support/us-access-and-support/us-access-reimbursement) to learn more.

Caring for your hair and head

Here are suggestions for how to care for your hair and head while you're getting treatment. To learn more, read *Hair Loss and Your Cancer Treatment* (www.mskcc.org/pe/hair-loss-cancer-treatment).

- Wash and condition your hair every 2 to 4 days. Use a fragrance-free shampoo and a cream rinse or hair conditioner.
- Always rinse your hair well and pat it dry with a soft towel.
- Brush or comb your hair gently with a soft-bristle brush or comb. Start brushing or combing your hair at the ends and gently work your way up to your scalp. You can also finger-comb your hair by wetting your fingers with water.
- If your hair is long, you may want to have it cut short before you start treatment.
- Try hair products designed to cover bald spots and thinning areas, such as Bumble and bumble™ Hair Powder.

Do not use the following things on your hair during treatment. They can be too harsh or pull on your hair.

- Hair spray, creams or oils, hair dye, bleach, relaxers, or permanents (perms).
- Clips, barrettes, bobby pins, ponytail holders, or scrunchies.

- Hair dryers, curlers, curling irons, hot rollers, or a hair straightener.
- Rubber bathing or swimming caps.

Also, don't put your hair in braids, corn rows, or ponytails.

Wigs and head coverings

You may still want to wear a wig or other hair covering during chemo. If you have any questions or concerns, talk with your healthcare provider.

Wigs

If you want to wear a wig or hair piece, try to get one before your hair falls out. It will be easier to match your hair color and style.

If you've already lost some or all of your hair, bring a photo of your usual hairstyle. It's also helpful to bring a lock of your hair, if you can. This will help you find a wig or hair piece that looks like your hair did before chemo.

When shopping for wigs or hair pieces, you may want to shop around and compare prices. A wig or hair piece should fit properly, be comfortable, and be easy to care for. You may want to start wearing it as soon as your hair starts to thin. As your hair gets thinner, you may need to have your wig or hair piece adjusted so it fits better.

Many insurance companies will pay for wigs or hair pieces when hair loss is related to medical treatment. Contact your insurance company to find out what your plan offers. If you need help finding a place to buy a wig or hairpiece, talk with your healthcare provider.

Head coverings

Scarves, turbans, and hats can help hold hair that's falling out. They can also hide a bald scalp. Head coverings come in lots of colors, textures, and styles. Scarves made from silk can easily slide off your head. You may want to buy a cotton blend scarf. This type can be more comfortable and less likely to come untied or slip off your head.

Some people choose not to wear any head covering during their chemo. This is your choice.

Look Good Feel Better Program

Look Good Feel Better offers free, online classes to learn about wigs, makeup, and skincare techniques. Visit www.lookgoodfeelbetter.org/virtual-workshops to sign up.

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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