

A GUIDE TO SCALP COOLING

头皮冷却指南



CAN-CARE
Your Personalised Post Care Partner

PAXMAN
PIONEERS IN SCALP COOLING

What is scalp cooling therapy?

Scalp cooling is a simple treatment that can prevent hair loss caused by certain chemotherapy drugs. The use of scalp cooling or 'cold caps' is proven to be an effective way of combating chemotherapy-induced hair loss and can result in a high level of retention or completely preserve the hair.



Why does chemotherapy make hair fall out?

Chemotherapy works by targeting all rapidly dividing cells in the body. Hair is the second fastest dividing cell in the body and this is the reason why many chemotherapy drugs cause hair loss.

The hair follicles in the growth phase are attacked, resulting in hair loss approximately 2 weeks after the commencement of chemotherapy.



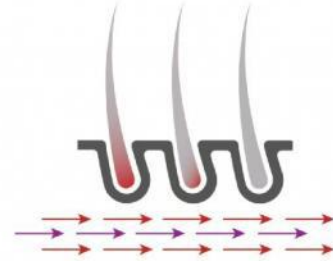
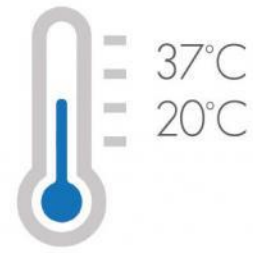
or



How does it work?

It works by lowering the scalp temperature to 18-22°C just before, during and after chemotherapy infusion.

This in turn reduces the blood flow and the amount of chemotherapy drug reaching the hair follicles which may prevent or minimise the hair loss.



How long does it take?

It would take 30 minutes before your chemotherapy infusion (45 minutes for thicker hair volume), during infusion (timing depending on your treatment) and for up to 90 minutes after drug infusion. After that, the cooling cap will remain on your head for about 5-10 minutes to acclimatise before you leave the hospital.



How is it done?

It is done by using a compact unit of cooling device and a special soft and lightweight silicone cap which is placed on your head. A special coolant flows through this connection to lower and maintain the scalp temperature throughout the treatment period. You need to do a cap fitting before your first scalp cooling therapy to ensure you use the correct cap size which has good contact with your scalp to preserve hair loss evenly.

The Procedure:



Cap fitting and selection of cap size will be performed prior to the first scalp cooling treatment.



Wet the hair and hair roots thoroughly from front to back hairline area to reduce the hair volume.



Apply a small amount of conditioner to the outer surface of the dampened hair.

4



Comb the patient's dampened hair back using a wide tooth comb or fingers so that the patient's front hairline is visible.

5



A fabric elastic hairband covers just below the hairline.

The band should also cover over the earlobes and under the nape (back) of the neck to minimize discomfort to avoid direct contact of the cold diner cap with the skin directly.

For thin hair and balder heads, hospital surgical caps may be used as a base layer before putting on the cap. This will minimise discomfort.

6



Fit silicone cap and cap cover onto patient's head.

7



Check to ensure the caps are strapped securely at all sides (side and back straps) before connect it to the system for scalp cooling therapy.



How would I feel during the therapy?

Tolerance of scalp coldness during cooling therapy varies from one patient to the next. Majority of patients reported high level of comfort and acceptability. Few people discontinued scalp cooling because of the chill and dizziness caused by scalp cooling.

It is very important to remember that the often intense feeling of discomfort or pain that is felt in the first 10-15 minutes of the scalp cooling treatment is transient and will go away as you acclimatise to the cold.

TIPS FOR RELAXATION:



Deep Breathing, Remain Calm and Relax. The chill feeling will diminish after the initial 10 - 15 minutes



Dress warmly in layers – even in warm weather



Hot drinks and blanket can help alleviate the coldness



Inform your nurse if you need any medications to help you with headache, dizziness and nausea. **Most patients do tolerate** scalp cooling very well



Distract yourself with reading or video watching



Will scalp cooling work for me?

Scalp cooling therapy is a choice, an option for you to take some control over hair loss due to chemotherapy. Scalp cooling therapy is most effective if it is started from the first chemotherapy treatment.

Paxman Scalp Cooling System is the leading global experts in scalp cooling, a clinically proven treatment available throughout the world to help patients keep their hair during chemotherapy.

Many thousands of patients throughout the world have retained their hair using the Paxman Scalp Cooling System when receiving their chemotherapy treatment. Successful scalp cooling depends on many factors such as type and stage of cancer, age, hair type, hair condition and general health.

Research has shown that scalp cooling is very effective across a wide range of chemotherapy regimens. Typically, patients start to experience hair thinning around 14-21 days after the first chemotherapy session. The therapy is considered effective as long as you do not require the use of a hair wig or head cover throughout your chemotherapy treatment.

CIA - Chemotherapy-Induced Alopecia

Chemotherapy-induced Alopecia (CIA) is actually hair loss caused by certain chemotherapy drugs. Some drugs used to treat cancer, including taxanes and anthracyclines could cause hair loss. The use of scalp cooling has been proven to be clinically effective in preventing CIA, or hair loss, and can result in patients retaining most of their hair, some patients retain all of it.

CIA, or hair loss can be prevented by cooling the scalp before, during and after chemotherapy infusion. The success rates of scalp cooling in reducing hair loss, vary from patient to patient and depend on the chemotherapy regimen administered. Scalp cooling is considered successful when the results show grade 0 or grade 1 alopecia at the end of the therapy.

The illustration and definition of alopecia grading will be as below:

Grade 0 Alopecia



or

Grade 1 Alopecia



**3-4 weeks after using cooling system for 4 cycles of chemotherapy*

Pictures are sourced from 1998-2015 Baylor College of Medicine.

Grade of Alopecia (Hair Loss)

Grade
0

No hair loss.

Grade
1

Hair loss of up to 50% for that individual that is not obvious from a distance but only on close inspection; a different hair style may be required to cover the hair loss, but it does not require a wig or hair piece to camouflage.

Grade
2

Hair loss of >50% for that individual that is obvious to others; a wig or hair piece is necessary if the patient desires to completely camouflage the hair loss; associated with psychosocial impact.



Source from *Clinical Investigation Plan: Orbis Paxman Hair Loss Prevention System, Protocol #H-33692, Revision 0.8 (03Feb15)

If some hair loss is experienced during scalp cooling, we would encourage you to persevere with the process – many patients report hair growth during their chemotherapy treatment whilst using scalp cooling, as new hair growth is also protected from the chemotherapy.

15 things you should know about scalp cooling:

Prior and During Treatment

- 1 Be proactive. If you feel the cap isn't tight enough on your scalp, please notify your nurse.
- 2 It is important that the cap is touching the crown of the head.
- 3 The chin strap may be uncomfortable but this is important for close fitting of the cap. Loosening it may prevent the cap from touching the crown and hair loss could occur. If it is causing you discomfort, ask your nurse to use some gauze as a cushion between your chin and the strap.
- 4 You should feel scalp cooling evenly throughout the scalp. If you do not, alert your nurse right away.
- 5 You can use a blanket or neck scarf and drink plenty of warm drinks to help with the coldness.
- 6 Consult your medical team for pain relief before the treatment if you are concerned you may get a headache.
- 7 If you have thick braids or hair extensions, please remove before using the scalp cooling system.

After Treatment

- 8 You could go for toilet break after the pre infusion (30mins) period is completed. Keep the break to less than 10 mins for maximum benefit.
- 9 You may see ice on your hair after completion of the treatment.
- 10 Avoid harsh hair treatments like colouring, extensions, braiding, curling, straightening, etc.
- 11 Brush your hair gently to minimise stress on the fragile hair. You may wash your hair with a mild shampoo to avoid sensitivity and irritation to the scalp. Reduce the brushing and washing frequency as needed.
- 12 Moderate hair loss (30-50%) is expected while using the cap.
- 13 If you don't feel you have to wear a wig or a head cover, it's considered a success.
- 14 You may experience hair re-growth during your treatment period while having scalp cooling.

Side Effects









- 15 Common side effects other patients have experienced during scalp cooling:
 - Complaints of coldness / cold related discomfort
 - Headaches ranging from mild to severe
 - Heavy feeling on the head
 - Forehead pain
 - Neck pain that comes and goes
 - Light-headedness or dizziness (during scalp cooling and / or following removal of the cap at the end of scalp cooling)
 - Complaints of uncomfortable sensations

Frequently Asked Questions



1. **Do I need to cover my head after scalp cooling therapy?**
Your hair may feel damp after the therapy. You may wear a loose fitting hat or a head cover after the scalp cooling therapy.
2. **Can I blow dry my hair?**
You should let your hair dry naturally after scalp cooling therapy. At home, you could blow dry your hair on a cooler setting. Avoid excessive heat on hair and dry it gently. Do not use hair straighteners, curling and colouring .
3. **Can I go to the washroom during treatment?**
Yes, you can. Please inform your nurse to disconnect the cap. However, it is advised not to exceed 10 minutes for your washroom visit during the infusion or post infusion cooling stage, as this could lead to increased risk of hair loss.
Note: *It is not recommended for you to use the washroom during pre-infusion cooling, so please do go to the washroom before this.*
4. **Can hair gels, mousses or hair spray be used after the scalp cooling therapy?**
It is not recommended to use these hair styling products as their ingredients can be very harsh to sensitive scalp and fragile hair. It may result in hair breakage or thinning, and possibly irritation to the scalp. If needed to, do stick to products with light to normal hold, as those with strong hold may not rinse off completely with the use of mild shampoo. This would result in the accumulation of the harsh ingredients on the hair shaft or scalp, causing discomfort and irritation. Do minimise amount used and frequency as well.
5. **How often can I wash my hair?**
You may keep your usual hair washing routine but wash it with mild shampoo and avoid warm water. The scalp can become sensitive to perfumes and preservatives in cosmetic shampoos so it is advisable to use mild shampoo especially during chemotherapy treatment. After washing your hair, keep it out straight. Never pile your hair on top of your head when shampooing or conditioning. We advise patients to wash their hair a day before scalp cooling session.
6. **How do I manage hair tangles?**
Use a mild conditioner. To remove tangles, hold the hair above the tangles while gently brushing with a wide tooth comb to avoid pulling on the hair roots.

Tips for scalp and hair care during chemotherapy and scalp cooling treatment

-  Your scalp may become more sensitive and your hairs more fragile during chemotherapy treatment.
-  Be gentle always with your hair! Avoid rubbing or pulling especially during shampooing; use the palm or finger pads to apply or massage instead.
-  Don't be afraid of brushing your hair. It is essential to use a good quality brush as poor quality ones will snag and tear your hair.
-  Place your hair in a loose ponytail instead of tying it back tightly with the elastic bands.
-  Cut your hair to a shorter length if preferred for easier handling (less stress, weight, strain and pull on hair roots).
-  Wash your hair at least 24 hours before scalp cooling therapy to remove any residue (sweat, oil and dirt) which acts as an insulator to scalp cooling.
-  To remove hair tangles while in the shower, apply a generous amount of conditioner and use a wide tooth to carefully comb it out. It helps to hold the hair above the tangles to avoid pulling and stressing the hair roots.
-  You can wash your hair immediately after your chemotherapy treatment. This helps you feel more comfortable especially if your hair has been dampened and conditioned before you start scalp cooling therapy.

Whilst undergoing scalp cooling therapy, it is not advisable to go to the hairdressers, so that your scalp and hair would not be put under too much stress. If you are keen to attend the **Look Good Feel Better** program, please contact Can-Care for more information.

It is best to hold off any hair or scalp treatment for at least 6 months after you have completed chemotherapy as your hair and scalp may still be fragile and sensitive during the hair regrowth and scalp healing period.

You may find it useful to read patient's stories or watch video testimonials of the many people who have used the Paxman system to retain their hair. Please visit paxmanscalpcooling.com