Clinical guideline for the use of Scalp Cooling for Chemotherapy induced Alopecia CHUGGS	University Hospitals of Leicester NHS NHS Trust Trust Reference Number C73/2023

1. Introduction and Who Guideline applies to

1.1 This guidance is for those registered and non-registered nurses working within the chemotherapy suite.

1.2 Those registered nurses who administer chemotherapy elsewhere in Cancer and Haematology should be aware of the guidance and the principles of scalp cooling.

1.3 To ensure patients receiving scalp cooling with the aim of reducing the effect of Chemotherapy Induced Alopecia receive the appropriate assessment and on-going care

1.4 To ensure the equipment is maintained and cleaned to reduce risks to the patient

1.5 To ensure that both registered and non-registered nursing staff caring for these patient on the chemotherapy suite have received the relevant training and education.

2. Guideline Standards and Procedures

2.1. Definitions

2.1.1 Scalp cooling is a method of reducing scalp temperature and causing constriction of blood vessels, thus decreasing the amount of drug that can pass into the hair follicles and reducing cellular uptake of the drug.

2.2 Patients and HCW's should be aware of the following:

• Hair loss is a possible side effect of chemotherapy.

• The treatment success rates vary from patient to patient and with different drug regimens being administered.

• Patients cannot be guaranteed they will not lose any or all of their hair.

• Some patients may experience feeling light headed after the cooling cap has been removed.

• Patients may visit the bathroom during the treatment.

2.3 Scalp Cooling: Contraindications, indications and side effects

2.3.1 Scalp cooling is contra-Indicated in:

Patients with haematological malignancies
Abnormal liver function
Manifest scalp metastases
Imminent bone marrow-ablation chemotherapy
Imminent skull irradiation
History of migraines
Cold sensitivity
Under 16 years old

2.2.2 Most Suitable Agents for Scalp Cooling

Cyclophosphamide
Daunorubicin
Docetaxel
Doxorubicin
Epirubicin
Paclitaxel

2.2.3 Side effects

Feeling cold
Dizziness
Headaches
Nausea

2.3. Role of Individual Staff

2.3.1 Staff should ensure scalp cooling is appropriate for the patient, their condition and required treatment.

2.3.2 That the equipment is in good working order.

2.3.3 Be aware of personal limitations. Advise a senior member of staff if they are not competent or confident to use the scalp cooler.

2.4. Procedure

2.4.1 The Health care worker (HCW) ensures equipment is

- clean
- turned on
- operational with no faults identified
- checks the coolant is topped up the level indicated
- The scalp cooler indicates it is ready for use and is at optimal temperature

2.4.2 The HCW ensures the cap is the correct size. The patient should be measured during their new patient case talk or during their first chemotherapy appointment in clinic, this is to be clearly documented on Chemocare and in the patients personal record. They should ensure it covers the hairline and the patient can feel the cap on the top of the head.

2.4.3 30 minutes prior to commencing their chemotherapy the HCW dampens the patient's hair and applies a thin layer of conditioner. They place the cap correctly on the patients head. They use a cotton head band to protect the patient's ears, forehead and exposed skin. The HCW then places the fabric cap over the cool cap and tightens the band ensuring a snug uniform fit. The HCW then sets the timer for 30 minutes.

2.4.4 Whilst the cool cap is in place the HCW ensures that the patient is kept warm, offering blankets and hot drinks as required.

2.4.5 The HCW ensures that the Chemotherapy nurse is informed when the timer goes at 30 minutes so that the chemotherapy can be administered.

2.4.6 Once the chemotherapy has been administered the timer is set as per manufacturer's guidance for post chemotherapy cooling times (see appendix 1). The HCW ensures the patient is aware of how long the cool cap will remain in place for. The HCW informs the patient of how to call for assistance before they leave.

2.4.7 The HCW returns when the timer alarms indicating the appropriate time has elapsed. The HCW

- Turns off the pump
- Removes the outer cap being mindful that this may have ice on it
- Allows the cool cap to gently warm to room temperature
- Once warm the HCW safely removes the cool cap asking the patient to help if appropriate.

2.4.8.The HCW ensures the procedure is correctly documented

2.4.9 The HCW follows the guidance for decontamination and ensures all the equipment is cleaned and stored correctly.

2.5. Decontamination and storage

2.5.1 The outer neoprene part of the cool cap can be cleaned with Clinell wipes provided it is otherwise visibly clean, the inner cool cap can also be cleaned as per outer cap provided it is not visibly soiled. If it is visibly soiled then it will need to be cleaned with soap and water and allowed to air dry. Once cleaned and dry the caps will then need to be stored in a covered container to avoid contamination.

2.5.2 There is a process to evidence equipment has been cleaned between each patient use. A patient sticker is placed on the rubber cap inside the neoprene outer cover to preserve patient dignity during the cap fitting process. This will then be removed during the decontamination process and an “I am clean” sticker put in its place and signed by the person cleaning the equipment.

2.5.3 It is not advised that chlorine based solutions are used in the cleaning process due to the close contact with sensitive skin.

3. Education and Training

3.1 On Induction the ward sister will discuss with the registered nurse and non-registered nurse the benefits of scalp cooling including the indications and contra-indications

3.2 All registered nurses attending the chemotherapy course will be taught the principles of scalp cooling

3.3 Those registered nurses and non-registered nurses working on the chemotherapy suite will receive training prior to using the equipment. Staff unable to attend this will be required to watch the training video on the company’s website and receive training from a member of the chemotherapy team identified by the ward sister.

3.4 Those staff working on the chemotherapy suite carrying out this procedure will have a competency based assessment initially and then on a 3 yearly basis or if there is a change in equipment.

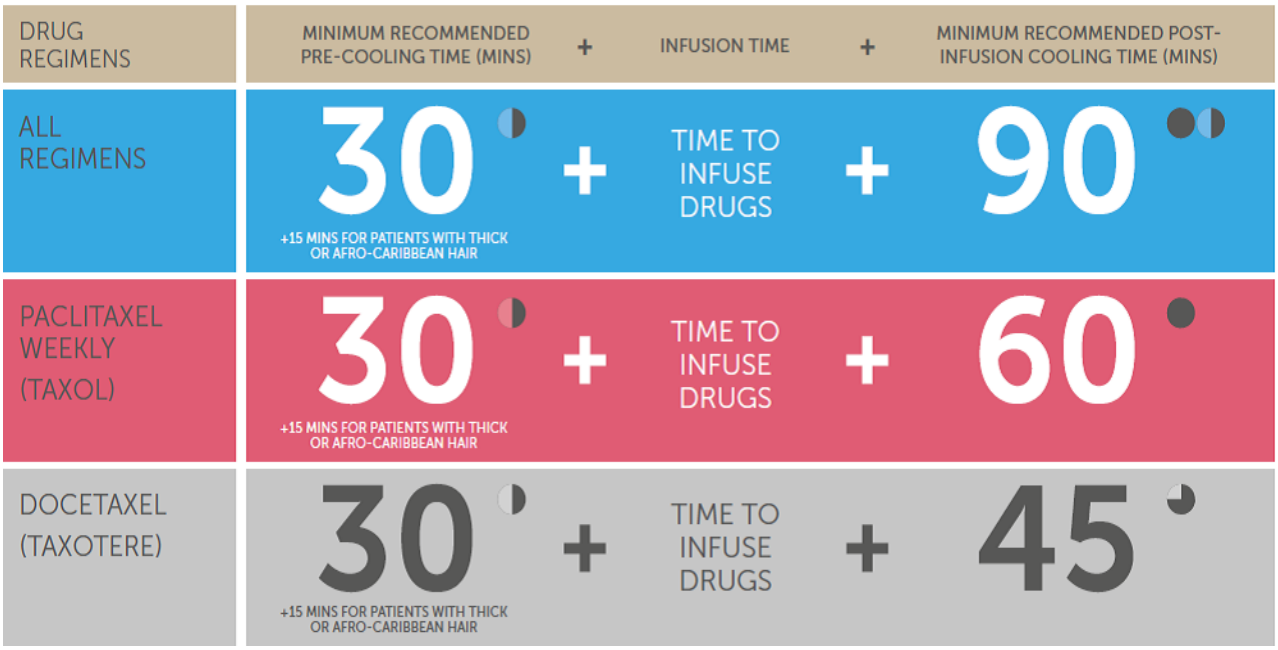
3.5 Training records will be kept by the ward sister. Initial and triennial competency assessments will be recorded on the individual’s electronic training record. A copy will be kept in the individual’s personal file.

3.6 Paxman offer a x2 yearly refresher training update for staff and cover the maintenance of the scalp cooling units for 5 years.

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Staff training	Training records	Anisa Khureshi	Yearly	To oncology matron
Maintenance of scalp cooling machines machines	Unit checklists	Anisa Khureshi	Monthly	Unit sister/ Paxman

Appendix 1 Standardised cooling times from Paxman January 2016



5. Supporting References (maximum of 3)

Paxmanscalpcooling.com

6. Key Words

Scalp cooling; alopecia;

CONTACT AND REVIEW DETAILS	
Guideline Lead Clair Burroughs – Macmillan SACT Lead Nurse	**Executive Lead**
Details of Changes made during review: new document to be added to PAGL	