Patient/Carer instructions for the administration of Subcutaneous Cytarabine

This document covers the following information:

- What cytarabine is
- What subcutaneous means
- What happens if you decide to inject Cytarabine at home
- Safety and Handling Requirements
- Equipment and Supplies
- How to administer the subcutaneous Cytarabine injection
- Dealing with spillage
- Useful Contact Numbers

What is cytarabine?

Cytarabine is a chemotherapy drug and is given to patients to try and gain control of the disease. The injections are given twice daily, 12 hours apart for 10 days. The next course is repeated at 28 to 42 day intervals and this continues for up to and sometimes beyond four courses depending on response and how it is tolerated.

What does subcutaneous mean?

Subcutaneous means giving the injection into the fatty tissue layer just under the skin. When you perform a subcutaneous injection, you use a short needle to inject into the tissue layer between the skin and the muscle on the abdomen (see figure below). The needle injected under the skin will not hit muscle, bone, or blood vessels.

Subcutaneous injections must not be given if the skin is burned, hardened, inflamed, swollen, bruised or damaged by a previous injection.
What happens if you decide to inject Cytarabine at home?

You and your carer will be:

- Given information to read and time to ask questions
- Shown how to prepare the things you need to inject yourself and give the injection.
- Able to practice getting the injection ready and giving the injection with a nurse supervising.
- When you have managed all of the above you will be able to administer the injections at home.

For as many teaching sessions as required, you will be supervised by the trained chemotherapy nurse. A final assessment will take place when you, your carer and the nurse are sure that you are competent to self–inject at home, you will be asked to sign a competency assessment proforma.

Safety and handling requirements

- Cytarabine is cytotoxic and must not be handled by women of childbearing potential, who are trying for a baby, are pregnant or breast feeding.
- It is safe to handle the Cytarabine in the ziplock plastic bags but only the people who are trained to handle the Cytarabine should handle the syringe once it is out of the bag.
- Always make sure that you keep the Cytarabine out of sight from children and pets and away from food.
- The Cytarabine needs to be stored at room temperature away from direct heat and sunlight.
- Remember to keep the spillage information and kit to hand in case you need it.
- You will receive all the contact details you need, including the day treatment unit and triage ward which can offer advice, support and information 24 hours a day.
- Carers need to report any needle stick injury (where the needle has pierced or scratched the skin) and seek medical attention immediately.
- In case of spillage into the eyes, wash the eye(s) with plenty of water for at least 10 minutes. Contact the day treatment unit/triage ward immediately for further advice

Equipment and Supplies

You will be given the following equipment:

- A cytotoxic sharps disposal bin
- Safety guard needles
- Alcohol/chlorhexidine wipes
- Gloves and apron if a carer is to do the injections
- Cytotoxic Spillage kit
- Cotton wool and tape
- Chemotherapy Diary Booklet
You will be given all your supplies at the beginning of each course. Therefore, you should not run out of anything. However, if this happens contact the day treatment unit or triage area.

Note: The cytarabine syringes will already have the exact dose of cytarabine that you have been prescribed.

How to administer the subcutaneous Cytarabine injection

Choosing your working environment
- You should work in an area where you will not be distracted
- Ensure the work surface is clean and that there are no food products within reach
- Only people who are helping you should be in the room so as to avoid distractions and inadvertent exposure

Getting the equipment ready:
- 1 Cytarabine syringe:
- 1 orange needle
- 1 cytotoxic sharps bin
- 1 tissue
- Tray (use a tray that is in good condition with no cracks, dedicated to chemotherapy only, keep separate from other trays for general/kitchen use).
- Kitchen roll (Use a new roll dedicated to chemotherapy only, keep separate from other rolls for general/kitchen use)
- Spillage kit
- 1 pair of disposable gloves and 1 apron (carer only)

Preparing the work area:
- Wash and dry your hands thoroughly and clean your preparation area and tray
- Collect all of the above equipment and place onto your cleaned area
- Wash and dry your hands once more and then make sure you have all the equipment to hand
- Taking the tray with you, move to a comfortable chair you will sit in, ensure you have a table or flat area on which to put the tray

Administering the Cytarabine injection:
- Sit down comfortably in a chair
- Check the syringe is in date has your name on it and that it is in date. If any of the information is incorrect in any way then you must not give the injection – you should contact the day treatment unit/triage ward immediately.
- If everything is correct peel open the needle packet and tip the syringe onto the tray.
- Check the syringe contents to make sure the solution appears clear like water with no particles in it. If it does not look clear then do not inject. Contact the Haematology Day Treatment Unit or Triage ward immediately
- Remove the screw stopper at the end of the syringe and then screw the needle onto the syringe
• Loosen the needle cover. Do not allow the needle to touch the injection tray or anything else because it will contaminate it. If this happens, then discard the needle into the sharps box and use a new needle.
• Place the ready syringe with the needle cover loosened back onto the tray.
• Ensure a piece of tissue is to hand.
• Decide where in the **abdomen** you will give the injection. You will need to remember to rotate the injection sites each time you give an injection to minimise bruising and discomfort.
• Using a fresh, sterile alcohol/chlorhexidine swab, clean the injection site by gently wiping in a spiral motion from the centre outward, being careful not to go back over already clean areas. Allow the site to air dry.
• Pick up the syringe and remove the needle cover. Hold the syringe low down the barrel as if you were going to write with a pen.
• Make sure the needle does not come into contact with anything on the way to the skin so to avoid contamination and the risk of introducing infection.
• With your free hand pinch the skin where you are going to inject and insert the needle at right angles (90° degrees). The needle will deliver the injection just below the skin.
• Once the needle is in place release the pinch on the skin if you need both hands. Use one hand to support the syringe and the other hand to push the plunger down slowly until all the drug has gone in.
• When the syringe is empty, remove the needle from your skin and place it directly into the sharps bin and place the tissue on your skin firmly over the injection site.
• When there is no leaking fluid or blood from the skin, remove the tissue.

**What to do after the injection**

• Do not put any of the used items in with your normal household waste. Discard the syringe, tissue, screw top, packaging and gloves and apron (if used) into the sharps bin. The bin must be stored out of sight and reach of children and pets.
• Wash and dry your hands
• If there is minor bleeding or bruising at the site, do not worry. This sometimes happens if the needle has punctured a small blood vessel, and will soon stop and the bruising will fade.
• Occasionally, Cytarabine can irritate the skin at the injection site. If this happens then contact the day treatment unit/triage ward who will advise you what to do.

**Dealing with a spillage**

• Keep the spillage kit and instructions at hand whenever you inject and make sure that your carer or family member knows how to use it.
• The amount of Cytarabine you are injecting is small but it is possible to accidentally spill it.
• If there is a spillage follow the instructions in the spillage kit.
• Keep all people out of the spillage area (especially children and pregnant women) except the minimum required to clear the spillage up.
• If chemotherapy has spilt on skin, immediately hold affected area under cool water for 10 minutes. Do not scrub because unbroken skin provides protection. Contact the day treatment unit/triage ward if you have any skin irritation after this.
Patient/Carer instruction for the administration of sc Cytarabine

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Authors: Jane Skelly and Nadjoua Maouche

This is a controlled document and therefore must not be changed

- Open the spillage kit away from the contaminated area.
- Do not touch the spill area until the protective clothing supplied in the spillage kit has been put on. The essential items are:
  - Rubber gloves.
  - Apron, tie around your waist.
- Use the absorbent material in the pack to wipe up any spillage, place in yellow bag and dispose of directly into cytotoxic sharps bin.
- Once the spill area has dried, wash the area with water only, and leave to dry. Do not add any cleaning agent to spill area. If spillage is on carpet, after washing, allow to dry and then hoover with a vacuum, (please do not use a steam cleaner).
- Once all the spillage has been cleared and the remaining chemotherapy contained, the protective clothing should be removed and placed into the plastic bag. Finally the gloves should be removed and placed in the plastic bag and sealed.
- Spillage on clothes: It is advisable not to wear expensive or delicate fabrics when having your chemotherapy treatment. Continue to wear gloves and apron while handling the contaminated clothing. If there is a small amount of the chemotherapy spilled onto clothes, the clothes should then be washed separately from non-contaminated clothing in the hottest wash available in a washing machine. It is advisable to wash contaminated items of clothing twice in the washing machine. If there is a large amount of fluid on the clothes the clothing should be immediately disposed of in the plastic disposal bag.
- In case of spillage into the eyes, wash the eye(s) with plenty of water for at least 10 minutes. Contact the day treatment unit/triage ward immediately for further advice.
- Accidental needle stick injury: If you follow all the instructions carefully, the chance of you getting an accidental needle stick injury is very small. If you or your carer do stick yourselves with the needle, it is important to make the puncture site bleed. Then wash the area with lots of running water and cover with a plaster. Contact day treatment unit/triage ward immediately and they will advise what you need.
- Always return your chemotherapy spillage waste to the local chemotherapy unit for disposal. Community nurses/Pharmacies/GP etc. do not have the facilities to dispose of this waste.

### Useful Contact Numbers

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<tr>
<th>Contact</th>
<th>Opening Hours</th>
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| **Haematology Day Treatment Unit, Churchill Hospital** | Tel: 01865 235554          Mon-Fri 08:00-18:00.  
Sat 08:00-16:00.  
Closed on Sundays and Bank Holidays |
| **Triage Assessment, Churchill Hospital**    | Tel: 01865 572192                              Open 24 hours a day, 7 days a week including bank holidays |
Patient/Carer Subcutaneous Cytarabine Administration Competency

(Give a copy to the patient/carer and retain a copy in the patient’s notes filed with consent)

Patient Name: 
Hospital Number: 

DOB: 
Allergies: 

Date of Assessment: 
Consent Obtained: Yes/No 

Carer’s name and contact details: 

Check list

- Patient Instruction sheet provided
- Possible side effects explained to patient/carer
- Patient/carer aware of how to contact the hospital if patient not feeling well
- Subcutaneous injection technique taught
- Equipment provided
- How to deal with spillage explained
- Patient/carer aware of follow up appointments

Observed doses (as many training sessions as needed to be observed by a chemotherapy trained nurse):

Dose 1 given by: ___________ Observed by: ___________ Date _________ Time_____
Dose 2 given by: ___________ Observed by: ___________ Date _________ Time_____
Dose 3 given by: ___________ Observed by: ___________ Date _________ Time_____
Dose 4 given by: ___________ Observed by: ___________ Date _________ Time_____
Dose 5 given by: ___________ Observed by: ___________ Date _________ Time_____

Final Assessment Declaration

I confirm that I have been trained to administer cytarabine subcutaneously and feel confident to do so
Patient/Carer’s Name: _________________________________________
Signature: _________________________________________ Date: ______________

I confirm that ___________________________ has been trained and observed giving cytarabine subcutaneously and is competent to do so.
Health Professional’s Name: ___________________________ Designation___________________
Signature: _________________________________________ Date: ______________