West Yorkshire & Harrogate Cancer Alliance

Regional Chemotherapy Nurses Group

Guidelines for the Checking, Administration and Handling of Systemic Anti-Cancer Treatment (SACT) (Parenteral or Oral) For Adults

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i Document Control

Title	Guidelines for the Checking, Administration and Handling of Systemic Anti-Cancer Treatment (SACT) (Parenteral or Oral) - Adults
Author(s)	Regional Chemotherapy Nurses Group **(which includes representatives from):** Airedale NHS Foundation Trust Bradford Teaching Hospitals NHS Foundation Trust Calderdale & Huddersfield NHS Foundation Trust Harrogate and District Hospital NHS Foundation Trust Leeds Teaching Hospitals NHS Trust The Mid Yorkshire Hospitals NHS Trust York Teaching Hospitals NHS Foundation Trust
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ii Information Reader Box

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1 Introduction

Systemic Anti-Cancer Treatment (SACT) is widely administered across primary, secondary and tertiary healthcare services across the West Yorkshire & Harrogate Cancer Alliance (WY&HCA).

SACT involves the handling and administration of drugs that are potentially harmful to both patients and staff. The delivery of SACT can result in the following adverse events occurring;

- Adverse reactions
- Extravasation
- Morbidity / Fatalities due to toxicity
- Occupational exposure hazards
- Contamination of the environment

Guidance and policy exists to reduce the associated risks;

- Control of Substances Hazardous to Health (COSHH) (1994)
- Royal College of Nursing (RCN) Standards for Infusion Therapy (2005)
- The Manual of Quality Measures for Cancer Peer Review (2004)
- National Confidential Enquiry into Patient Outcomes and Deaths within 30 Days of SACT (NCEPOD) 2008
- NPSA/2008/RRR001 Risks of incorrect dosing of oral anti-cancer medicines.

OBJECTIVE

These guidelines offer evidence-based practice to support safe working practices, aiming for standardisation of practice across the WY&HCA.

SCOPE OF THE GUIDELINES

These guidelines are applicable to all staff across the West Yorkshire and Harrogate Cancer Alliance involved in the handling, checking and/or administration of SACT to adult patients.

TARGET PROFESSIONAL GROUP

All professionals involved in the handling, checking and/or administration of SACT to adult patients.

2 SACT Delivery Environment

SACT delivery should be undertaken in an area suitable for the activity with adequate staff, expertise and support services.

2.1 Facilities available should provide (RCN 1998):

- an uncrowded and uncluttered administration area
- the ability for nursing staff administering SACT to observe patients at all times with access to at least one other health professional trained in basic life support for immediate assistance if necessary.
- emergency life support equipment
- adequate lighting and work surfaces
- privacy and dignity for patients
- designated patients toilets
- immediate access to a telephone and emergency call bell
- furniture and equipment which is fit for purpose
- a designated area for the storage of SACT (DH 2004)
- a designated area for the preparation of any supporting drug therapies (DH 2004)

2.2 Support services must be readily available (RCN 1998).

- resuscitation team,
- senior clinical staff,
- pharmacy,
- pathology laboratories,
- information technology
- housekeeping,
- portering
- waste disposal

Areas that administer SACT should have a written policy which states the circumstances when SACT can be delivered outside of normal working hours.

Any extended working hours must be accompanied by provision of support services to manage any adverse events (RCN 1998).

3 Training for nurses to undertake the administration or checking of oral and intravenous SACT

3.1 General knowledge

All nurses should work in accordance with The Code (NMC 2015) and national guidance on safety and quality in SACT delivery.

Nurses administering or checking SACT should have a thorough knowledge of the NMC's Standards for Medicines Management (2010) and local Medicines Policies.

3.2 SACT Specific knowledge

All nurses must have completed the regional Chemotherapy/SACT education programme; the content of which should be agreed by the Network Leads for SACT training and education.

The training should include;

- Attendance of a regional chemotherapy study day
- Completion of the Regional Chemotherapy Nurses Group, Chemotherapy/SACT portfolio
- Supervised practice
- Assessment of practical competencies using the regional competency framework.

Nurses currently undergoing training may administer SACT under the supervision of a registered nurse competent in the administration of SACT.

Those responsible for competency assessment must meet the following criteria;

- Hold a teaching & assessing qualification e.g. ENB 998, MIP, SLIP
- Must have given SACT for over 18 months
- Must be SACT competent themselves
- Assessors must be competent in the clinical skill which they are assessing e.g. if assessing a staff member cannulating and giving bolus SACT then they must also be skilled and competent in this task.
- It is desirable that the assessor holds an appropriate level III cancer qualification/module

Each unit or ward should keep an up to date register of assessors.

Nurses administering or checking intravenous SACT **peripherally** must:

- Have successfully completed a cannulation course and be signed off as competent.
- Have attended a course on administering intravenous medications and be signed off as competent to give intravenous medication.

Nurses administering or checking intravenous SACT **via a Central Venous Access Device (CVAD)** must:

- Have attended a course on the care and management of CVAD and be signed off as competent to use and care for CVAD.
- Have attended a course on administering intravenous medications and be signed off as competent to give intravenous medication.

Nurses administering or checking **oral** SACT must:

- Must be competent in delivering oral medications before progressing to administration of oral SACT agents.

Nurses must have their SACT competencies reviewed annually using the Regional Competency Documents.

A record of competent staff should be kept locally. This should include their competency documents and record of annual review.

4 Safe handling of cytotoxics

Managers should identify those at risk of occupational exposure to cytotoxics and carry out COSHH (Control of Substances Hazardous to Health) assessments for each activity involving the handling of cytotoxics to assess the level of risk and the adequacy of control measures in place.

Nurses working in the area must undergo training in the safety issues of the handling, administration and disposal of cytotoxic drugs.
Patients and carers should be educated that urine, stools and vomit may contain breakdown products of cytotoxic drugs for as long as seven days after a patient has received treatment.

Safe handling procedures must be audited and documented on a regular basis to ensure staff compliance and to reduce risks to as low a level as is reasonably practicable.

4.1 Personal Protective Equipment

- Gloves must be worn for the administration, delivery and disposal of SACT and should be changed when damaged and between patients (RCN 1998).
- The correct glove size is important (Health & Safety Executive 1992).
- Hands must be washed before and after the use of gloves.
- Gloves must be worn for any contact with bodily fluids from patients receiving SACT, as drugs can be present for up to seven days post SACT (RCN 1998)
- Plastic disposable aprons must be worn for the administration and handling of SACT or waste (RCN 1998)

4.2 Spillage Risk Management

- Ensure all personnel involved in handling SACT waste are aware of policies and protocols for handling spillage (RCN 1998). A local policy on spillage should be in place.
- A spillage kit and eyewash equipment should be immediately available in the delivery area.
- Change SACT infusions on a trolley at waist height away from the eyes of patients and staff. Best practice is to retrograde prime cytotoxic drugs.
- An absorbent disposable towel with a waterproof back must be placed beneath patient's hand to absorb accidental SACT spillage when administering bolus drugs.
- When administering bolus SACT use gauze beneath side arm of infusion set to absorb accidental spillage of drugs.
- Oral SACT must be handled using the `no touch technique'. Tablets should be used in preference to solutions and should be foil or blister wrapped. (RCN 1998).
  Tablets must not be crushed where this can be avoided. If it is not possible to give the medicine in its original dosage form, appropriate pharmacy advice must be sought and personal protective equipment worn.(RCN 1998)
  - A spillage kit and explanation of its use must be provided to all patients receiving ambulatory SACT

4.3.1 Cytotoxic Disposal in the hospital setting

- Administer SACT within reach of a cytotoxic waste bin.
- Discard all empty SACT bags/syringes into a cytotoxic waste bin immediately after use.

4.3.2 Cytotoxic Disposal in the home

- Discard all empty SACT delivery pumps into a cytotoxic waste bin immediately after use. The cytotoxic bin will be provided by the treating department.
- Used cytotoxic waste bins should be locked in the patient's home and then returned to the local chemotherapy day unit for disposal.
- The contents of vomit bowls/bedpan/urinals/ostomy bags should be flushed down the toilet using a double-flushing method. Any disposable containers, along with gloves/wipes/aprons, should then be double bagged and disposed of in the outdoor household waste. Non-disposable containers should be washed thoroughly in warm soapy water

4.4 Safe Handling of Cytotoxics in Pregnancy

The emphasis should be on clear guidelines to reduce occupational exposure to all staff at all times (MARCH Guidelines 2008).

When a manager receives notification that a member of staff is pregnant, COSHH risk assessments must be reviewed to ensure that particular consideration is given to the risks of exposure for that individual (MARCH Guidelines 2008).

4.4.1 Staff education

All staff (including men) should be fully informed of the reproductive hazards by:

- Receiving verbal and written information on induction
- Signing to say they have read and understood the relevant COSHH assessments
- Providing opportunity for discussion of any concerns.

4.4.2 Staff choice

- Pregnant staff or those trying to conceive (including men) should always be offered alternative duties if they choose not to work with cytotoxics at this time. This may not be within their normal place of work.
- Managers should have consideration for their staff's perception of the risk of exposure to cytotoxics.

4.4.3 Reducing the risk

- As some pregnancies are unplanned, or staff unwilling to discuss plans for conception, the emphasis should be on clear guidelines to reduce exposure to all staff at all times.
- Staff should be encouraged to discuss plans for pregnancy with their manager in confidence.
- Staff should be advised to inform their manager as soon as a pregnancy is suspected or confirmed.

- Pregnant staff or those trying to conceive should be removed from duties involving the preparation of cytotoxic drugs (HSE, HSG 122, 2002)
- Managers in areas with a perceived high risk of occupational exposure may wish to consider moving all pregnant staff or those trying to conceive away from handling cytotoxics.

5 Patient assessment

5.1 Initial Pre-treatment Assessment before starting a new course of SACT

All patients receiving their first cycle of SACT, including patients who are receiving oral SACT to take at home, should have a face-to-face comprehensive assessment and information/counselling session completed by an appropriately trained registered nurse (DH 2004, NCAG 2008)

The purpose of the assessment is to ensure all patients and their families, where appropriate are fully informed about their SACT.

The session should deliver the following information and assessment;

- Details of the proposed SACT regime and treatment delivery plan.
- Written information on the specific SACT drugs they will receive.
- Details of SACT side effects and when to take action.
- Chemotherapy alert card with details of the 24 hour 7 day week helpline number
- Supply or ensure the patient has a thermometer, details on how to use it and what to do when the reading is abnormal.
- Details of how the SACT will be delivered.
- Signs and symptoms to be aware of during SACT administration for example signs of an allergic reaction or extravasation.
- If intravenous SACT is to be given venous assessment to be carried out.
- If oral SACT is being given information on how and when to take at home.
- A full drug history taken including any over the counter, vitamin, herbal or other alternative remedy drugs. Advice should be given on discontinuation of any of these with potential to interact with SACT.
- Has a holistic assessment including physical, social, spiritual and psychological needs and a toxicity baseline assessment
- Is referred to appropriate agencies where assessment has highlighted a need.
- Has signed a consent form

If the nurse has concerns with the patients' understanding of the above, this should be discussed with the medical practitioner responsible for treatment decision.

5.2 Ongoing Pre - SACT Assessments before each cycle of SACT

All patients receiving subsequent cycles of SACT, including patients who are receiving oral SACT to take at home, must have a holistic assessment and toxicity assessment completed by a medical practitioner or an appropriately trained registered

nurse or an appropriately trained pharmacist. This should be completed as close to the administration of the next cycle as possible (maximum of 48 hours prior) (DH 2004, NCAG 2008).

The assessment should include;

- Checking baseline observations
- Recording weight and recalculation of surface area if required.
- Checking blood results are within the correct limits.
- Chemotherapy Toxicity Review using the NCI Common Toxicity Criteria for Adverse Events Version 4.0 (National Cancer Institute 2008) or other evidenced based toxicity assessment ensuring any toxicities are within recognised limits in line with agreed regimen specific protocols.
- Review of any new medical events or hospital admissions.
- Details of interventions initiated to counter side effects.

If side effects or blood results are outside of recognized limits, the nurse should consult with medical staff or work to a recognised protocol when making decisions about interventions or proceeding/delaying SACT.

If it is unclear whether SACT administration should proceed medical staff must be consulted.

6 Checking of SACT

All SACT must be prescribed in the context of a written protocol and treatment plan.
All staff that prescribe or administer SACT should have ready access to appropriate written protocols and treatment plans including guidance on monitoring and treatment of toxicity. Protocols may be accessed from each local trust.

6.1 Prescription checks

All SACT prescriptions must be checked by two registered nurses, at least one having been assessed as SACT competent for that method of administration. A registered nurse and a medical practitioner at registrar level or above may check but the nurse must have been assessed as competent in SACT administration. For oral drugs, local policy may allow a registered nurse and one other checker that has been agreed at local level and meets the NPSA (2005) requirements for checking oral SACT.
The following prescription checks should be undertaken;

- Positive patient identification as per local policy. Patient name, date of birth and address should be checked verbally, on the prescription chart and on the patient's wristband. If patient is unable to verify these details, these should be verified with next of kin, guardian or designated representative.
- The prescription has the correct patient name, NHS / unit number, date of birth and address (RCN 2005)
- The initiating prescriber is a doctor of SpR Grade or above or an authorised expert non-medical prescriber.
- Prescription has the correct date and cycle number.
- Results of all critical tests and these checked against the ranges for the regime.
- A recent accurate height and weight.
- Correct dose calculation taking into consideration any dose reductions
- The correct route of administration
- Allergy status and previous adverse reactions.
- Check the current prescription against the previous cycle for any discrepancies.
- Consent form should be checked on first cycle.

6.2 Drug checks

- The patient's name, prescribed drugs, doses and route of administration on the prescription chart corresponds to the labels attached to the drugs (RCN 2005).
- Parenteral solutions for appearance, type and volume of fluid (RCN 2005).
- Intravenous hydration and line flushes should also be checked.
- Oral medication; number of tablets against the prescriptions and the label on the drug container.
- Expiry time/date. (RCN 2005)
- Sequence of drug administration - SACT and supportive medication may not always be administered in the sequence shown on the prescription chart. Refer to protocol if unsure.
- Supportive drugs have been included on the prescription if required.

7 Administering oral anticancer medication

The administration of oral anticancer medication is as important as the administration of IV SACT, both in the precautions needed to protect the professional administering the medication as well as the effect and side effects experienced by the patient and subsequent monitoring required. The oral nature of the preparations does not make them any less toxic.

7.1 Definition

Oral anti-cancer medicines include any medicine which has a direct anti-tumour activity including cytotoxics, targeted therapies and immunotherapies. It does not include hormonal or anti-hormonal therapies.

Where these medicines are used for non-cancer treatment local organisations should undertake a risk assessment and apply the NPSA (2008) guidance as appropriate.

7.2 Local Policies and Procedures

All trusts should prepare local policies and procedures that describe the safe use of oral anti-cancer medicines including:

- Treatment must be initiated by a cancer specialist
- All oral anti-cancer medicines should be prescribed in the context of a written protocol and treatment plan.
- Non specialists who prescribe or administer on-going oral anticancer medicines should have ready access to appropriate written protocols and treatment plans including guidance on monitoring and treatment of toxicity.
- Staff dispensing oral anti-cancer medicines should be able to confirm that the prescribed dose is appropriate for the patient and that the patient is aware of the required monitoring arrangements by having access to the written protocol and treatment plan from the hospital where the treatment was initiated and advice from a pharmacist with experience in cancer treatment in that hospital.
- Patients should be fully informed and receive verbal and up-to-date written information about their oral anti-cancer therapy from the initiating hospital including; contact details for specialist advice, intended oral anti-cancer regimen, treatment plan and arrangements for monitoring. (NPSA 2008).

7.3 Counselling patients / Information giving for oral SACT

When pharmacy staff and other healthcare professionals supply the oral anticancer medicine to the patient (or relative or carer) they must ensure that the person receiving the medicines fully understands how and when to take them.

In addition to the initial pre-SACT assessment detailed in section 5.1 the following information should be given to patients starting oral anti-cancer medication.

- What to do in the event of missing one or more doses

- What to do in case of vomiting after taking a dose
- Likely adverse effects and what to do about them
- Any need for and how to obtain further supplies
- The role their GP is expected to play in their treatment
- Principles of safe handling, storage and disposal
- That if used, medicine spoons or measures should be used once only and then disposed of safely
- Any drug specific advice regarding safely crushing of tablets or opening of capsule

If this information and advice is not given to the patient in a clinic appointment or whilst on a ward/ day unit the pharmacy staff responsible for cancer services must ensure that systems are in place to provide the advice at point of dispensing.

It must be documented which member of staff hands medicines to patients.

If after counselling the patient, it becomes apparent that the patient does not understand how to take the medicines or will have difficulty in compliance the patient should be referred back to the prescriber.

7.4 Administration

Staff administering oral anticancer medicines on non-oncology/ haematology wards to in-patients must;

- Contact members of the patient's specialist team for information and advice about the oral anti-cancer medicine.
- Have access to the specified regimen protocols.
- They must not continue oral SACT when a patient has been admitted acutely for any reason. They should seek advice from the patient's haematology or oncology consultant/team.

All staff administering oral anticancer medicines to patients must be familiar with their own trust's procedure.

To administer oral anti-cancer medicines the following should be done;

- Ensure that the prescription has been written by a cancer specialist
- Check the patient's medication. Ensure it correlates to the directions prescribed on the prescription. If not, contact pharmacy.
- Carry out all checks as detailed in section 6.1 and 6.2
- Put on a pair of protective gloves
- Transfer the required dose from the patient's bottle or blister pack into a container using a no-touch technique.
- Hand the container to the patient and observe them taking the dose.
- Both nurses should sign the box corresponding to the dose on the drug chart. If for any reason the patient is unable to take the dose, enter the relevant omission number and document the reason in the dedicated section on the chart.
- Take the container and dispose of on the ward as a cytotoxic and place gloves in the same bin.

7.5 Adverse Reactions

All drugs have the potential to cause an allergic/adverse reaction.

The patient must be educated to report any adverse symptoms immediately.

Stop SACT immediately if there are any signs and symptoms of an allergic or adverse drug reaction. Instigate management of the allergic/adverse reaction immediately according to local policy.

8 Administering Intravenous SACT

8.1 Venous Access

Cannulation for SACT should minimise patient discomfort, the risk of phlebitis and the risk of extravasation.

8.1.1 Siting of the cannula

- Assess the patient's veins prior to cannulation, considering veins on the proximal forearm in the first instance.
- Consider veins on the hands only where no suitable veins can be found on the forearm.
- Note that if cannulation fails you must move above the failed site otherwise there is a risk of extravasation/ infiltration. This should be considered when initially assessing veins and when deciding whether to use the proximal forearm or hand.
- Avoid cannulating the wrist and antecubital fossa* as these areas are mobile and can contribute to mechanical phlebitis and displacement of the cannula. Lower limbs should also be avoided. Extravasation associated with the above areas could result in severe damage (SJUH 1996). * NB. Cannulation of the antecubital fossa for SACT delivery should only be used under the guidance of an experienced practitioner, when there is an urgent clinical need for treatment and when a central line cannot be placed.
- Avoid cannulating a limb that has reduced sensitivity including where a patient is experiencing pain or where axillary node clearance has been performed. (RCN 2005, Perucca 1995, Millan 1992).
- Avoid cannulation of a vein that has recently undergone venepuncture unless the new cannulation is proximal to the old site to avoid drug leakage from the vein (SJUH 1996).

8.1.2 Devices

- Cannulate with a non-ported, small gauge (e.g. 22g or 24g) device (Peters et al 1984, Payne-James et al 1991).
- A winged cannula will facilitate control of placement, optimal securing of the device and avoid displacement (Dougherty & Lamb 2008).
- Do not use a butterfly device (steel needle winged device). They are associated with an increased risk of infiltration/ extravasation and reduce operators control throughout the procedure.
- Avoid direct manipulation of the device. Attaching an extension set with clamp to the cannula after insertion will help avoid unnecessary cannula movement (RCN 2005)

8.1.3 Technique and Safety

- Use heat and tourniquets to encourage vein dilation.
- Avoid the use of topical anaesthetic when siting a cannula, as the reduction of sensitivity affects a patient's ability to recognise pain. Do not use topical anaesthetic when vesicants are to be administered. Where topical anaesthetic is used, extra vigilance must be observed throughout SACT administration.
- If the patient is to use cold cap therapy to reduce hair loss, cannulate prior to application of the cap.
- It is safer to site a cannula immediately prior to commencing SACT delivery. Using an existing cannula is not optimal practice and should not be used when vesicants are to be administered. Where a decision has been made to consider the use of an existing cannula, a complete assessment should be undertaken to ensure it is well positioned, patent and not at risk of extravasation immediately prior to delivering

peripheral SACT.

8.1.4 Securing the cannula

- Use a clear film IV dressing to secure the cannula; to reduce the risk of phlebitis and extravasation, and allow observation of the site at all times. (Dougherty & Lamb 2008)

8.1.5 Post cannulation checks

- Ensure venous return can be easily established from the device (RCN 1998)
- Commence a prescribed compatible line flush using a gravity infusion set: ensure the drip rate is rapid and consistent.
- Ensure the cannula site is free from signs of swelling, infection or phlebitis.
- Ensure the patient is not experiencing pain from the cannula site.

8.1.6 Central venous access

It may be appropriate to consider the need for central venous access device (CVAD) in patients who:

- Have difficult venous access
- Experience persistent vein irritation during SACT administration
- Are needle phobic
- Are to receive ambulatory SACT

Prior to SACT administration via a CVAD:

- Assess the CVAD for venous return and patency
- Ensure there is no leakage, or patient discomfort around the catheter tunnel site, shoulder or chest wall
- Ensure a rapid drip rate when using an infusion set. A reduced infusion rate could demonstrate a partial catheter occlusion.

Management of identified CVAD problems should be in accordance with the West Yorkshire and Harrogate Cancer Alliance Guidance for the Management of Central Venous Access Device (Updated 2017), local policies and protocols.

8.2 Administration of intravenous SACT via peripheral cannula or CVAD

- SACT should be checked as detailed in section 6.1 and 6.2
- Nurses should wear appropriate PPE as set out in section 4.1
- If a cannula is being used the patient's arm should be supported when administering SACT to reduce movement and make observation of the cannula site easier.
- The cannula site should be observable throughout the administration of SACT to detect early signs of leakage, infiltration, extravasation or phlebitis. The site should not be covered with bandages or heat packs.
- The intravenous line should be flushed with 50mls of a compatible solution after each SACT drug.

8.3 Administration of intravenous bolus SACT via a peripheral cannula or CVAD

- Use the side arm of a sodium chloride 0.9% infusion, injecting the drugs in small amounts in a standard sequence whilst maintaining a fast flowing infusion (RCN 1998).
- Needle free systems should always be used. A piece of gauze should be held under the side arm of the drip as SACT is being administered.
- The drip rate should be fast and consistent. Any slowing of the drip rate should be investigated as this could indicate extravasation.
- A fast flowing drip rate helps to dilute the drug which helps to prevent chemical phlebitis and cording.
- Venous return should be monitored periodically through the administration of SACT.
- A cytotoxic sharps box should be within reach so that SACT syringes can be disposed of immediately after administration.
- If giving more than one SACT drug the order should be vesicant drugs first, then irritant drugs and then non–irritant drugs. If more than one vesicant drug is being administer, give the one with the smallest volume first. Note anti-emetics and pre-medications prescribed may be given first in accordance with the SACT protocol.
- Vesicant drugs should not be administered via a medical device peripherally **except** via the Hosperia Plum A Infusion Pumps. These pumps are specifically designed to allow the concurrent delivery of vesicant/irritant SACT boluses and sodium chloride. The vesicant/irritant drugs are diluted and given safely as per the protocol under careful observation of a registered SACT competent nurse.

8.4 Administration of intravenous infusional SACT via a peripheral cannula or CVAD

- Select the appropriate giving set for the SACT drug being administered. For example light sensitive giving set for dacarbazine.
- Use a closed system administration giving set where possible.
- Administer the infusions at the prescribed rate.
- Volumetric infusion devices may be used to deliver infusional SACT except when delivering vesicant drugs which must be run using a gravity infusion set and with the utmost of caution (Dougherty & Lamb 2008) All pumps used must be well maintained, include pressure sensors and appropriately sensitive alarms (RCN 1998).
- Vesicant infusions should only be administered via gravity infusion unless being administered via a CVAD; drip rate should be monitored to ensure it is consistent. Venous return on a cannula should also be checked periodically through the infusion of vesicants at least every 30 minutes.
- Vinca-alkoloids are administered via an infusion mini bag in 50mls 0.9% sodium chloride over 5-10 minutes. The nurse must remain with the patient and observe the administration for the whole infusion.
- Patients must be advised to alert staff immediately if they experience any discomfort during the infusion. Cannula assessments should be made periodically throughout infusional SACT.
- Once SACT is completed IV giving sets and empty bags should be disposed of in cytotoxic sharps bin.

8.5 Extravasation (see former YCN extravasation policy 2010 – under review)

Stop infusion immediately if:

- venous return ceases
- drip rate is no longer rapid and consistent
- patient experiences unexpected pain
- cannula site is red or swollen
- CVAD exit site is leaking
- Patient experiences pain / discomfort / swelling around the CVAD tunnel site, shoulder or chest wall.

Where it is suspected that extravasation has occurred, instigate extravasation procedures. (See former Network extravasation policy 2010). If there is any doubt, treat with caution and carry out extravasation procedures.

There must be extravasation kits and hot/cold packs in any area where intravenous SACT is delivered.

Where extravasation has been ruled out the following can be considered;

- If the patient complains of pain/discomfort but there is a rapid infusion rate and venous return, consider whether pain is caused from vein irritation. Apply heat to the area and ensure drugs are well diluted. If in doubt, re-cannulate. NB. Some SACT drugs are known to cause vein irritation resulting in the patient experiencing pain e.g. oxaliplatin or dacarbazine.
- Where venous return is absent but is not associated with pain / discomfort / erythema or swelling and where there remains a rapid infusion rate, clinical judgement should determine the decision to proceed. Advice should be sought from a senior SACT practitioner.
- If a patient is uncomfortable due to venous pain then re-cannulate.
- When a rapid and consistent infusion rate cannot be re-established through flushing the cannula with sodium chloride 0.9% or applying heat to relieve vein spasm then the cannula must be removed and the patient re-cannulated before proceeding with treatment.

8.6 Allergic / adverse reactions

All drugs have the potential to cause an allergic/adverse reaction. Some drugs are known to have a high potential to cause allergic reactions patients receiving these drugs should be pre-medicated with corticosteroids and antihistamines as per the SACT protocol.

Some SACT drugs are known to cause allergic reactions after multiple administrations.

The patient must be observed constantly throughout treatment and educated to report any adverse symptoms immediately.

Stop SACT immediately if there are any signs and symptoms of an allergic or adverse drug reaction. Instigate management of the allergic/adverse reaction immediately

according to local policy.

An anaphylaxis kit should be available in the SACT administration area at all times. All staff should be trained in the management of anaphylaxis.

SACT must not be re-commenced following allergic or adverse reaction without senior medical advice.

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9 Documentation

Complete documentation following administration of SACT in accordance with NMC guidance (NMC 2009)

Standardised documentation of the SACT process is recommended and will facilitate good record keeping; for example treatment pathways, cannulation records.

Electronic documentation is an effective way of facilitating good communication across the treating teams. SACT treatment areas should provide good access to information technology and computer equipment to facilitate this.

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