	Policies and Procedures LPN Additional Competency: Care of Short Term, Tunneled, Implanted Central Venous Catheters Title: CENTRAL VENOUS CATHETERS – SHORT TERM, TUNNELED, IMPLANTED - CARE OF <ul style="list-style-type: none"> - accessing - dressing changes - tubing and adapter changes - flushing/ locking I.D. Number: 1086
Authorization: <input checked="" type="checkbox"/> SHR Nursing Practice Committee	Source: Nursing Date Revised: January 2017 Date Effective: March 1997 Scope: SHR & Affiliates

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DEFINITIONS

This Policy applies to care of **Central Venous Catheters (CVC)**: A venous access device whose tip dwells in the superior or inferior vena cava:

Client- a term used to describe a client, patient or resident.

Implanted Port- access is through a port that is surgically placed in the chest or arm. Note: Accessing Implanted Ports is not an LPN Additional Competency. LPNs can maintain an Implanted Port once accessed by an RN or GN.

Short Term (Percutaneous) catheter-inserted into the subclavian, jugular or femoral vein used on a temporary basis for clients in urban acute care only (up to 30 days).

Tunneled (Long Term) tunneled under the skin then inserted into subclavian vein, catheter is used in hospital or home care for long term therapy.

Other Central Lines:

Introducer Catheters – large lumen catheters usually placed in a jugular or subclavian vein used for administration of fluids or for threading of other lines in ER or critical care (e.g. cordis, trauma line). There must always be an infusion running through the introducer and it should not be “locked”. Whenever possible these lines will be removed while the patient is in critical care. Extra caution may be required due to increased risk for infection, air embolism or hemorrhage.

Hemodialysis Catheter – these large dual lumen catheters are usually placed in the internal jugular or subclavian vein for hemodialysis. These catheters are used **ONLY for dialysis** and are not to be accessed for general IV use. Dressing changes may be done following central line care principles, however, all other care will be performed only by hemodialysis or CRRT trained nurses. Refer to SHR Nursing Policy: Hemodialysis –Vascular access #2410 and Hemodialysis Catheters - Emergent Access to Line #1099

ROLES

Graduate Licensed Practical Nurses (GLPNs) – GLPN certification for this Additional Competency is under review by the SHR Nursing Practice Committee. GLPNs will not be certified until the review is completed.

Graduate Nurses (GNs) - as assigned RNs provide care for Short Term, Tunneled and Implanted Central Venous Catheters with direct supervision until determined by an RN supervisor to be competent to practice autonomously for the following skills: accessing, dressing changes, tubing and adapter changes and flushing/ locking.

Licensed Practical Nurses (LPNs) – LPN certification for this Additional Competency is under review by the SHR Nursing Practice Committee. As assigned, currently certified LPNs may continue to provide care for Short Term, Tunneled and Implanted CVCs for the following skills: accessing, dressing changes, tubing and adapter changes and flushing/ locking. LPNs requiring initial certification will not be certified until the review is completed. **Prerequisite:** LPN must have completed SaskPolytechnic IV Therapy/Blood & Blood Products Completer Course or equivalent

Medical Radiology Technologists (MRT) care for clients seen in Medical Imaging for Short Term, Tunneled and Implanted Central Venous Catheters for the following skills: accessing, dressing changes, tubing and adapter changes and flushing/ locking.

Registered Nurses (RNs) – as assigned RNs provide care for Short Term, Tunneled and Implanted Central Venous Catheters for the following skills: accessing, dressing changes, tubing and adapter changes and flushing/ locking.

1. PURPOSE

- 1.1. To maintain the patency of central venous catheters.
- 1.2. To minimize the risk of infection, damage, displacement and other complications associated with the care and use of CVCs.

2. POLICY

2.1 Physician Order required

- Heparin lock

2.2 Special Considerations

- Prior to accessing CVCs for any reason, nurses must perform appropriate Hand Hygiene procedures (Infection Prevention & Control policy # 20-20)
- To decrease the risk of contamination, accessing CVCs should be kept to a minimum
- Assess daily the continued need for a CVC
- To prevent peripheral implanted port occlusion and/or damage, avoid using same arm for BP's or venipuncture

2.3 Accessing a CVC

- Assess CVC function by aspirating for blood return and flushing prior to each intermittent CVC use(administration of medication or infusion) and as clinically indicated with continuous infusions (e.g. occlusion alarms) **Exception** : Acute Care Pediatrics/PICU small lumen (3 Fr. And under)where no blood withdrawal or blood infusion is recommended. Physician will be notified and Medical Imaging may be consulted for intervention if unable to flush a lumen or if unable to aspirate for blood return
- Direct luer lock connections will be used for continuous infusions

- Intermittent medications/fluid will be administered through a needleless adapter or needleless injection port on IV tubing
- Acute Care Pediatrics: applies a needleless adapter for all IV infusions
- Needleless adapters will be cleaned for 15 seconds using an alcohol swab and friction in a twisting motion prior to each access (scrub the hub)
- For accessing an Implanted Port see SHR Nursing Policy: Central Venous Catheters – Implanted Ports -Accessing and Discontinuing Access #1032

2.4 **Flushing and locking CVCs** (not required for continuous IV infusions)

Refer to **Adult/Pediatric Standards chart Appendix A, B & C**

2.4.1 **Flush all CVC lumens with 0.9% Sodium Chloride** (Short term, tunneled and implanted)

- after blood withdrawal
- after blood administration
- before and after each medication administration,
- for maintenance of an unused lumen
 - Flush lumens using stop & start flush technique
 - CVCs will be flushed using at least a 10mL syringe to avoid excessive pressure, to avoid possible rupture of the catheter or dislodgement of a clot
 - Physician will be notified and Medical Imaging may be consulted for intervention if unable to flush a lumen or aspirate blood

2.4.2 **Lock the following with: Heparin flush (100units/mL)**

Adults: all tunneled (Long Term) and Implanted Ports

Pediatrics: all Short Term, Tunneled (Long Term) and Implanted ports

See Adult/Ped Standards (Appendix A, B & C) for amounts of flush

Note: Heparin requires an Independent double check prior to use

- **Acute Care Pediatrics, PICU and NICU** follow unit protocols for flushing CVCs

2.5 **Changing Tubing and Adapters**

- Prior to changing needleless adapters or tubing, clean connection for 15 seconds using an alcohol swab and friction in a twisting motion
- Prime tubing and adapters prior to attaching to CVC

2.5.1 **Needleless Adapters:**

- CVC lumens will be capped with a sterile needleless adapter at all times when not directly connected to tubing

Acute Care Pediatrics: needleless adapter applied to all IV infusions

Home Care Clients only: for clients only getting a weekly maintenance flush, Luer lock plugs (or dead enders) may be used (replaced after each access)

Change needleless adapters: every 7 days and if removed for any reason, if there is residual blood or debris within the needleless connector and prior to drawing a sample for blood culture. Document change on care plan/flowsheet.

2.5.2 **Tubing and extension sets** will be changed q96hrs except:

- lipid emulsions: parenteral nutrition tubing q 24hr
- propofol q 12hr (**RN only**)
- blood transfusion tubing q 8 hours, after 4 units infused or if more than an hour has elapsed between infusions

- o When tubing is changed, any needleless adapters, stopcocks or other tubing connected to the same lumen must be changed at the same time
- o New IV tubing will be used when a new CVC is inserted
- o Clamp lumens with manufacturer's clamp when not in use (non-valved CVCs)

2.6 Dressing Changes

Use aseptic technique using sterile gloves when applying new dressings.

Skin will be disinfected with Chlorhexidine 2%/Alcohol 70% during dressing changes

Note: for infants less than 2 months, or client sensitive to chlorhexidine, use povidine-iodine swab or 70% alcohol swab or wipe off chlorhexidine with sterile saline

2.6.1 Dressings will be changed :

- Transparent semi-permeable dressing every 5-7 days and prn when dressing soiled, wet or non-occlusive.
- Gauze (or combination of gauze & transparent dressing) – every 2 days

Site will be assessed at least every 8 hours for:

- signs of inflammation
- infection
- bleeding
- leakage at insertion site
- length of CVC
- secure sutures/securement device

Report any concerns to the physician.

Home Care: Educate the client /family to recognize and report any of the above symptoms to their nurse

2.7 Catheter Securement

CVC must be stabilized with sutures or stabilization device.

If CVC migrates externally it should not be advanced back into the vein. The CVC should be stabilized at the point of external migration and assessed by physician/Medical Imaging prior to further use.

2.8 Catheter Damage

If the CVC catheter becomes damaged, immediately clamp the line between the break and the chest wall to prevent air embolism or bleeding from the device. Notify the physician immediately.

Note: some tunneled catheters may be repaired by the physician using a repair kit (kits are size specific).

3. PROCEDURES

3.1 **Assessing CVC patency** – Assess CVC function by aspirating for blood return and flushing prior to each intermittent medication or intermittent infusion or when clinically indicated with continuous infusions. **Exception:** Acute Care Pediatrics/PICU small lumen (3Fr. and under) where no blood withdrawal or blood infusion is recommended.

3.1.1 Supplies

- 10 mL syringe prefilled with 0.9% Sodium Chloride
- alcohol swabs
- CVC Adult, Pediatric or PICU Standards (Appendix A, B & C) for flush volumes

- 3.1.2 Perform hand hygiene.
- 3.1.3 Clean needleless adapter for 15 seconds using an alcohol swab and friction in a twisting motion. Allow to dry.
- 3.1.4 Attach 10mL syringe prefilled with 0.9% sodium chloride.
- 3.1.5 Gently flush lumen with 1-2 mLs of 0.9% sodium chloride.
- 3.1.6 Gently aspirate the CVC for blood return just until blood can be seen in the CVC lumen
- 3.1.7 Flush the lumen with remainder of saline, using stop and start flush technique.
- 3.1.8 Administer medication/infusion.
- 3.1.9 Perform hand hygiene following procedure.
- 3.1.10 Following medication administration, flush lumen as per Standards (Appendix A,B &C)

3.2 Flushing and Locking

- 3.2.1 Flushing and locking is performed on Central Venous Catheters that are used intermittently (not connected to a running infusion), following each access. If the CVC is not routinely accessed then these lumens are flushed/locked on a schedule specific to each type of CVC (Adult/Pediatric/PICU Standards - Appendix A, B & C).
- 3.2.2 Supplies:
 - 10mL syringe prefilled with 0.9% sodium chloride (1 for each lumen to be flushed)
 - Heparin solution 100 units/mL
 - Needles (blunt) and syringes to draw up Heparin
 - alcohol swabs
 - CVC Pediatric or Adult Standards chart (Appendix A, B & C) for amounts of flush and lock solutions to be used
- 3.2.3 Perform hand hygiene
- 3.2.4 Open catheter clamp (non-valved CVC).
- 3.2.5 Clean needleless adapter for 15 seconds using an alcohol swab and friction in a twisting motion. Allow to dry.
- 3.2.6 **Flush:** Attach 0.9% Sodium Chloride flush syringe, inject the required volume and remove the empty syringe:
 - after blood withdrawal, before and after medication administration, for maintenance of an unused lumen
 - using a stop and start flush technique

***Note:** A pulsatile flushing technique of 10 short boluses of 1 mL interrupted by brief pauses may be effective at removing solid deposits.*

 - Do not use force to flush or lock a CVC.

3.2.7 **Lock:** Inject Heparin flush through the needleless adapter and remove the empty syringe. The MicroClave needleless adapter maintains neutral pressure within the CVC which prevents the back flow of blood into the catheter.

3.2.8 Clamp the catheter after the syringe has been removed (on CVC's that have a clamp).

3.2.9 Repeat the procedure for other lumens.

Note: Use separate flush and lock syringes for each lumen.

3.2.10 Perform hand hygiene following the procedure.

3.2.11 Documentation:

- Record Heparin administration on appropriate record.
- Record fluid volumes as appropriate on Fluid Balance Record.

3.3 Tubing and Adapter Change

3.3.1 Supplies:

- alcohol swabs
- primed needleless adapter
- primed tubing
- extension set (if needed)
- Multiport stopcock (critical care only)
- syringe with Heparin if needed - see Standards chart
- 10mL syringe prefilled with 0.9% Sodium Chloride
- Tubing change sticker
- Clean gloves

3.3.2 Perform hand hygiene and apply clean gloves.

3.3.3 For tubing change, stop IV infusion.

3.3.4 For clamped CVC, clamp lumen to prevent air embolism or blood loss.

3.3.5 Clean needleless adapter or tubing connection where the hub meets the lumen for 15 seconds using an alcohol swab and friction in a twisting motion. Allow to dry.

3.3.6 Loosen connection to facilitate rapid change over. If difficult to loosen, use a tourniquet or glove for improved grip. Do not use metal forceps as this could damage the hub.

3.3.7 Disconnect tubing or adapter.

3.3.8 Clean CVC catheter end with alcohol swab. Allow to dry.

3.3.9 While maintaining aseptic technique to avoid catheter contamination, connect new primed tubing or adapter.

3.3.10 Unclamp catheter and re-establish IV infusion, if applicable.

3.3.11 Flush and lock unused lumens according to CVC Standards (Appendix A,B & C).

3.3.12 Remove gloves and perform hand hygiene following procedure.

3.3.13 Document date of tubing or adapter change on care plan or other appropriate document. Write date changed on tubing change sticker and attach to tubing.

3.4 Dressing Change

3.4.1 Supplies:

- dressing tray/set (if needed)
- clean gloves
- sterile gloves
- 0.9% Sodium Chloride (for skin cleansing if required)
- 2 - Chlorhexidine 2%/Alcohol 70% - swab sticks for skin disinfection
- Sterile transparent semi-permeable or sterile gauze dressing
- tape if needed
- sterile cotton tipped applicators (if required)
- Alcohol based hand sanitizer

3.4.2 Perform hand hygiene and don clean gloves.

3.4.3 Remove dressing.

3.4.4 Discard gloves and dressing.

3.4.5 Perform hand hygiene.

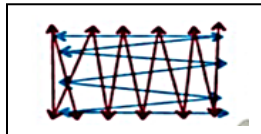
3.4.6 Inspect insertion site for:

- signs of infection or inflammation
- secure sutures or stabilization device in place
- catheter slippage/movement
- leaking IV fluid
- pain or swelling along tunneled area

Notify physician promptly if any of the above are noted

3.4.7 If drainage is present, cleanse skin and catheter with 0.9% Sodium Chloride using aseptic technique.

3.4.8 Disinfect skin with 2% Chlorhexidine/Alcohol 70% swab stick applicator. With the first swab stick, using friction, clean around the exit site of catheter and area where dressing is to be placed using a back and forth motion for 15 seconds. Flip the swab stick and moving in opposite direction clean site for another 15 seconds. With the second swab stick, cleanse length of exposed catheter. For patients less than 2 months old wipe off chlorhexidine after 30 seconds with sterile 0.9% Sodium Chloride.



3.4.9 If there is a contraindication to chlorhexidine, providine-iodine or 70% alcohol can be used as alternatives.

Note: *Silicone catheters can be damaged with adhesive removers and acetone.*

3.4.10 Allow skin to dry completely.

- 3.4.11 Apply skin protectant to area for irritated or fragile skin and if catheter stabilization device will be used (using aseptic technique and avoiding the insertion site).
- 3.4.12 Perform hand hygiene.
- 3.4.13 Don sterile gloves.
- 3.4.14 Apply new catheter stabilization device if catheter is not sutured in place (follow manufacturer's directions for use).
- 3.4.15 Apply transparent semipermeable dressing to cover both the insertion site and sutures/securement device. Lay transparent dressing in place and mold it over the catheter with fingertips. Do not stretch dressing over skin surface. Slightly overlap the border tabs under hub of lumens. Press transparent portion of dressing into place. Add adhesive strips to stabilize CVC and to label dressing change date. Apply gentle pressure to entire dressing to ensure optimal adhesion.
- 3.4.16 If using plain sterile gauze, secure with a full border of tape or cover with transparent dressing.
- 3.4.17 Secure tubing to the skin with supplied tape strips to prevent traction on the dressing or insertion site.
- 3.4.18 Remove gloves and perform hand hygiene
- 3.4.19 Document dressing change and condition of insertion site on appropriate record.

Other CVC policies:

#1001 Central Venous Catheters – Care of Peripherally Inserted Central Catheters

#1042 Central Venous Catheters – Blood Withdrawal - PICC, Short Term, Tunneled, Implanted

4. REFERENCES

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CENTRAL VENOUS CATHETERS - Adult Standards November 2017

Prior to accessing CVC for any reason perform **Hand Hygiene** for at least 15 seconds with alcohol-based hand rub or antiseptic soap and water.

	PICC Clamp less, valved e.g. BioFlo PICC	PICC with clamps, non-valved	Short Term Percutaneous -jugular, subclavian or femoral	Tunneled Long term e.g. Hickman	Implanted Port chest or arm e.g. Port-a-Cath, P.A.S. port
Accessing	Syringe or IV tubing via needleless adapter				Non coring safety needle primed with 0.9% Sodium Chloride *See below for sizes available
Check Placement	<i>Gently aspirate to visualize blood return then flush with 0.9% Sodium Chloride</i>				
Frequency of Flushing and Locking <i>(Flushing and Locking not required for continuous IV infusion)</i>	Flush after each access or Once a week if unused	Flush after each access or Q 24 h if unused	Flush after each access or Q 12 h if unused	Flush & lock after each access or Once a week if unused	Flush & lock after each access or Once a month if unused
Flush Volume (0.9% sodium chloride)	10mLs before & after medication administration. 20mLs after blood administration or withdrawal				20mL
Heparin Lock (100units/mL)	N/A		N/A		3mL (300 units)
Heparin Lock Syringe Size	N/A		N/A		12mL
Dressing changes	<ul style="list-style-type: none"> ▪ Transparent semipermeable q 5-7 days and PRN when dressing soiled, wet or non-occlusive ▪ Transparent semipermeable with gauze or gauze alone q2 days ▪ Clean skin with saline prn, then for skin antiseptis use Chlorhexidine 2%/alcohol 70% swab stick. 				
Needleless Adapter Change <i>(Use needleless adapter on all unused and intermittent use CVC lumens)</i>	Once a week for unused lumens. Change every 96 hours if tubing is connected.				Once a week if port accessed
Blood Sampling Discard Volume <i>Use discard tube or 10 mL syringe</i>	1 tube or 5 mL			2 tubes or 7 mL	2 tubes or 7 mL

* Stock # in SPD: **Gripper Plus Safety Needle:** 22G X 1-215487 22G X 3/4 -215484 22G X 5/8 -215485 21G X 1-215486 20G X 3/4- 215482 20G X 5/8 -215483
Gripper Micro Safety Needle: 20G X 3/4 - 200939 22G X 3/4 - 200941 22G X 1 -200942



CENTRAL VENOUS CATHETERS - Pediatric Standards

Appendix B
December 2016

Prior to accessing CVC for any reason perform **Hand Hygiene** for at least 15 seconds with alcohol-based hand rub or antiseptic soap and water.

	PICC (under 3 Fr)	PICC (3 Fr & over)	Short Term Percutaneous - jugular, subclavian or femoral	Tunneled Long term, e.g. Hickman	Implanted Port Chest or arm
Accessing	Syringe or IV tubing via needleless adapter				Non coring safety needle primed with 0.9% Sodium Chloride
Check Placement	Flush with 5 -10mLs 0.9% Sodium Chloride	<i>Gently aspirate to visualize blood return then flush with 0.9% Sodium Chloride</i>			
Frequency of Flushing (0.9% sodium chloride) <i>Flushing NOT required for continuous IV infusion</i>	Before & after medication administration	After each intermittent access Before & after medication administration After blood administration or withdrawal			
Flush Volume (0.9% sodium chloride)	5mL	Volume weight based: less than 10 kgs: 5mL greater than 10 kgs: 10 – 20mL			10 - 20mL
Frequency of Heparin Locking <i>Locking NOT required for continuous IV infusion</i>	N/A *Unless physician specific orders written*	N/A	After each intermittent access Q 24h to unused lumen		After each intermittent access Q 24 h if accessed but not used Once a month if deaccessed
Heparin Lock Volume (100units/mL) wt. greater than 10 kgs or accessed 5 times or less/24 hrs.	N/A	N/A	1.5mL(150units)		2.5mL(250units)
wt less than 10 kgs or accessed 6 times or more/24 hrs.			0. 2mL heparin (100 units/mL) added to 1.8 mLs 0.9% sodium chloride (20units)		0. 2mL heparin (100 units/mL) added to 1.8 mLs 0.9% sodium chloride (20units) Deaccess ONLY: 2.5mL (250units) (Heparin 100 units /mL)
Heparin Lock Syringe Size	12mL				
Dressing Change	<ul style="list-style-type: none"> o Transparent semipermeable with gauze or gauze alone q2days o Transparent semipermeable q 5-7 days and PRN when dressing soiled, wet or non-occlusive o Clean skin with saline prn, for skin antisepsis use 2% Chlorhexidine swab stick <p>Note: ages 2 months & under – clean skin with chlorhexidine, let the skin dry then wipe off chlorhexidine with 0.9% sodium chloride</p>				
Needleless Adapter Change <i>use adapter on all CVC lumens</i>	Once a week on unused lumens. Change every 96 hours if tubing connected.				Once a week if ACCESSED
Blood Sampling Discard Volume <i>use discard tube or 12 mL syringe</i>	No blood sampling No blood transfusions		3mL		

PICU Central Venous Care Guidelines 2016

	PICC under 3 French	PICC 3 French & over	Percutaneous CVL/CVP	Long Term Tunneled Silicone	Long Term Implanted port	Umbilical Venous (Argyle)
Lumen Volume	1.9Fr=0.105mL	3 Fr=0.145mL	Per pkg or lumen instruction	2.7Fr=0.15mL	Port-0.2-0.7mL Needle system-0.5-0.7 mL	Single Lumen 3.5 FR=0.15mL 5.0 Fr=0.30mL Multilumen-see pkg or lumen instructions
Flush & Locking						
Saline Flush/Lock -use 6 -10 mL syringe -Use stop/start motion	-Before and after meds or bloodwork -Unused: q 24 hr. -Amount to clear lumen (at least 0.5 mL)	Before and after meds or bloodwork -Unused: q 24 hr. -Amount to clear lumen(at least 0.5 mL)	-Before and after meds or bloodwork -Amount to clear lumen(at least 0.5 mL)	-Before and after meds or bloodwork Volume: < 10 kg-5 mL > 10kg-10mL	-Before and after meds or bloodwork Volume: 2-5 mL	Before and after meds or bloodwork -Amount to clear lumen
Heparin Lock (Physician Order required)	25 units/mL 0.5-1mL q 8 hrs. and prn	No-Saline Lock at least q 24 hrs. Note -consider Heparin lock if patency problematic. Order required.	0.5-1.5mL of 25 units/mL q 8 hr. & prn	Non Accessed: 1.5 mL of 100 u/mL q 24 hrs. Intermittent Access: 1.5 mL of 10 units/mL q 8hrs & prn	Non accessed: 1.5 -2.5 mL of 100 u/mL monthly Intermittent Access: 1.5-2.5mL of 25 units/mL q 8hrs & prn	4 units/mL 2x lumen volume Q 6 hours
Blood work draw	No	Yes	Yes	Yes	Yes-use port closest to patient.	Yes
Blood Discard	n/a	2x lumen volume	2x lumen volume	3-5mL	2-5mL	n/a
CVP Monitoring	No, unless ordered	No, unless ordered	Yes, Distal lumen	No, unless ordered	No, unless ordered	As ordered
Acceptable Meds (CVL dilution if fluid restricted)	ALL IV meds	ALL IV meds	ALL IV meds	ALL IV meds	ALL IV meds	ALL IV meds
Parenteral Nutrition	Dextrose <= 30%, amino acids, lipids. Consider heparin in PN at low rates	Yes-all	Yes-all	Yes-all	Yes-all	Dextrose<= 50%, amino acids, lipids
Blood administration	NO	NO unless no other site	NO-unless no other site	NO-unless no other site	Yes	Yes

	PICC under 3 French	PICC 3 French & over	Percutaneous CVL/CVP	Long Term Tunneled Silicone	Long Term Implanted port	Umbilical Venous (Argyle)
Routine Care						
Tubing Change (including stop cocks and caps not put on with sterile field)	TPN-q 24 hrs. IV -q 96 hr.	TPN-q 24 hrs. IV -q 96 hr.	TPN-q 24 hrs. IV/CVP -q 96 hr.	TPN-q 24 hrs. IV -q 96 hr.	TPN-q 24 hrs. IV -q 96 hr. Access Needle- q 7 days	Q 24 hours
Dressing -Sterile technique -Skin Asepsis with Chlorhexidine- wash off if < 2 month age	Transparent-q 7 days & prn Gauze-q 24 & prn	Transparent-q 7 days & prn Gauze-q 24 & prn	Transparent-q 7 days & prn Gauze-q 24 & prn	Transparent-q 7 days & prn Gauze-q 24 & prn	Transparent-q 7 days & prn Gauze-q 24 & prn	Transparent-q 7 days & prn Gauze-q 24 & prn