PRINCE ALBERT PARKLAND HEALTH REGION
Nursing Department

SECTION:	**Administration & General**	**NUMBER**: 170-10-89P
TOPIC:	**Compression Bandages (multi-layer) application and maintenance.**	**DATE APPROVED**: **September 27, 2016**
APPROVED BY:	**Management**	**REVIEW DATE**: **March 2018**
REVISED DATE:	**March 27, 2018**	

Purpose:

- For management of venous leg ulcers, lymphedema and other clinical conditions where compression is appropriate.
- To standardize this treatment throughout the PAPHR so that all clients receive treatment that is in keeping with best practice guidelines.
- To ensure that trained staff will be able to maintain a **previously initiated** multilayer compression bandage system, thus allowing clients/patients to receive uninterrupted treatment.

Definition of Certified Nurses:

- Licensed RN's/RPN's/ LPN's that have completed additional **Certification Training** for the RN Specialty Practice (Advanced RN Intervention of compression bandaging).

Certification Training includes:

For ACUTE Care, Home Care and Long Term Care:

1. Completion of the Learning Package "Multi-layer Compression bandages Learning Package".
2. Must complete 2 supervised applications of the bandaging technique under the supervision of an experienced Coban Certified Health Care Professional, Coban certified Clinical Nurse Educator or Enterostomal Therapist.
3. Requires an annual review of education. This can be done by reviewing the Learning Package, instructional application videos on the website: www.3M.ca/Coban2Layer or by making an appointment with a Coban certified clinical Nurse Educator or the Enterostomal Therapist.

Policy:

1. **Multi-layer Compression Bandages require a Physicians order. The order must specify the level of compression (Coban™ 2 regular or Coban™ 2 lite).**
2. **Multi-layer compression bandaging will only be applied by certified Nurses and applied according to manufacturer's recommendations.**

3. **The client/patient must have had a current ABPI (Ankle Brachial Pressure Index) at least in the previous 6 months that is in the acceptable range for the prescribed**

compression therapy /or the patient has been assessed by a vascular surgeon who has ordered the compression therapy.

4. **Any Coban Certified health care professional may apply the initial Coban wrap provided that the above requirements have been met and the client has reviewed the information pamphlet: "Compression Therapy-Compression is for Life" with the health care professional. If there are wounds present underneath it would be beneficial to consult an enterostomal therapist.**

5. **Untrained staff will receive information regarding the care and management of multilayer compression bandages and will provide inspection and assessment (maintenance) of compression bandages.**

6. **Assessment of client/patient tolerance to the compression bandaging system will be done once a shift and will be documented on the Multilayer compression bandage record. This document would be filed in the wound record section of the chart.**

7. **Any abnormalities that are noted will be reported to one of the following (as applicable to your workplace): certified nurse, Wound resource Nurse, RPN, Enterostomal Therapy Nurse, NP, MRP.**

8. **If the nurse is unable to direct their concerns/abnormality to the most appropriate individual the client/patient will have the bandages removed. Arrangements should be made for the client/patient to be assessed and rewrapped in compression bandages by a certified nurse as soon as reasonably possible.**

Procedure:

Equipment:

1. Bandage scissors to remove previous multilayer compression bandages
2. Person care supplies required to wash and moisturize area to be compressed
3. Wound care supplies as required
4. Multilayer compression bandages as ordered by prescriber.

Prior to application:

1. Verify prescriber's order to confirm level of compression and frequency of change
2. Assess and manage pain as required.
3. Remove present multilayer compression bandages using bandage scissors cutting from the toes up in a zig zag pattern or unwrapping the bandages.
4. Assess skin condition.
5. Cleanse and moisturize the limb and periwound skin.
6. Obtain and document limb measurement (narrowest at ankle and widest at calf) refer to Learning Package, prior to initial application and weekly thereafter to determine when edema reduction is achieved.
7. Provide local wound care (if applicable) Multilayer compression bandages are not designed as wound dressings.

NOTE: refer client/patient to appropriate disciplines to maximize and individualize the treatment plan to address issues that may have an impact on healing (i.e. physical therapy for mobility/gait assessment, dietician for nutrition to optimize wound healing) Attempt to control, minimize or eliminate underlying issues such as diabetes, hypertension, etc.

Apply multilayer compression bandage system as per manufactures' recommendations.

1. Basic application illustrated instructions: http://multimedia.3m.com/mws/media/713568O/coban-2-layer-2-layer-lite-compression-system-basic-app.pdf?fn=70-2010-8235-4.pdf
2. Thin fragile leg application illustrated instructions: http://multimedia.3m.com/mws/media/713569O/coban-2-layer-litethin-fragile-leg-illustrated-instructions.pdf?fn=70-2010-8236-2.pdf
3. Highly contoured leg cutting technique Illustrated instructions: http://multimedia.3m.com/mws/media/713570O/coban-2-layer-cutting-technique-illustrated-instructions.pdf?fn=70-2010-8237-0.pdf
4. Highly contoured leg follow the roll illustrated instructions: http://multimedia.3m.com/mws/media/713571O/coban-2-layer-follow-the-roll-technique-illustrated-instruction.pdf?fn=70-2010-8238-8.pdf
5. Full leg application: http://multimedia.3m.com/mws/media/917473O/coban-2-layer-compression-sys-full-leg-application-instructions.pdf?fn=70-2011-5425-2.pdf

Follow the Roll technique:

Many patients have extreme leg contours and a traditional spiral wrap is difficult to achieve. In cases such as these the wrap may be applied in a **Follow the Roll Technique.** With minimal overlap, and with just enough tension to conform smoothly along the contours, wind the bandage around the ankle and proceed up the leg applying the layer in the direction the roll takes you. The top of the bandage should end just below the fibular head, or two fingers width below the crease at the back of the knee. Bring the bandage back down the leg to cover all areas of the skin. To ensure as thin a layer as possible, try to minimize the areas of overlapped material. This technique can be used with both the comfort layer and the outer compression layer.
See hyperlink below:

http://solutions.3mcanada.ca/3MContentRetrievalAPI/BlobServlet?lmd=1326386194000&locale=en_CA&assetType=MMM_Image&assetId=1319218515316&blobAttribute=ImageFile

Care following the initial application:

Every 8 hours for 24 hours the client/patient's lower limb (s) must be reassessed for:

1. Pain (location, intensity, onset, quality)
2. Circulation (skin temperature, blanching, capillary refill, color, sensation) swelling and movement of lower limbs and toes. Compare to other limb if applicable.
3. Client/patients that have a history of cardiovascular disease, chronic obstructive pulmonary disease, or our palliative need to be assessed for signs and symptoms of **Heart Failure.**

- **This assessment should be done by a licensed health professional.**
- **If the patient is a home care client, the client and their family will be taught the signs and symptoms of compromised circulation or respiratory issues.**
- **If there are any concerns, the prescriber or person who initiated the therapy shall be consulted immediately.**
- **Should no consult available the bandages shall be removed and the client/patient will be reassessed by the prescriber or MRP/designate as soon as reasonably possible.**

Maintenance Procedure:

Ensure that untrained staff, the client and their family are aware of the care and management of the multilayer compression bandages.

Assessment should be performed every shift:

1. Inspect Bandages for:
    a. Any soak through of drainage or other moisture
    b. Any client manipulation of the bandages (i.e. pushed down or partial removal, cutting or slippage)

2. Assess the client for:
    a. Ongoing pain
    b. Excessive selling of toes or knee
    c. Increased numbness/tingling of the feet
    d. Unusual discoloration with unresolved pain
    e. Exacerbation of signs and symptoms of heart failure (i.e. sudden shortness of breath, cough, white frothy phlegm, crackles, edema etc.) In this case the MRP would be the initial consult.
3. Report any abnormal findings of the inspection and assessment to the MRP, Enterostomal Therapist, and/or certified nurse

Client teaching: Client/patient is to receive the information pamphlet: **"Compression Therapy-Compression is for Life" hyperlink**

1. Reinforce teaching that:
    a. Bandages must remain dry; may shower on scheduled dressing change days.
    b. Never alter or rewrap bandages.
    c. Encourage activity and ambulation as tolerated.
    d. Avoid sitting or standing for greater than 2 hours.
    e. Avoid restrictive clothing or crossed legs.
    f. Alternate activity with elevating the legs (30 minutes 4 times per day).

2. If the following symptoms occur teach the client to elevate their legs and take analgesia:
    a. Increased lower leg pain
    b. Numbness and tingling in the feet
    c. Swelling, blueness/whiteness or discoloration of the toes
    d. Bandages that feel tighter than usual

PATIENT SAFETY ALERT:
If the symptoms are not resolved by elevation and analgesia, REMOVE the bandages and notify the MRP/Enterostomal Therapist, and/or certified nurse.

Documentation:

Assessment of the condition of the bandage and limb should be performed every shift and documented in the Nursing system assessment.
Further documentation such as bandage changes is to be done on the Multilayer Compression Bandage Record. Hyperlink: Multilayer Compression Bandage Record.

Discharge:

1. Physician orders including type of compression (Coban™ 2 lite or Coban™ 2 regular) frequency of bandage changes must be sent to Home Care or LTC
2. Ensure Home Care clients are aware to call their local home care office if they have concerns about their compression bandages before they are seen by a Home Care nurse.
3. Ensure that discharge teaching is done and provide the client with the Compression Bandage Client Information and Safety Instructions.

References:

1. 3M Coban™ -wound care: critical and chronic care:
http://solutions.3m.com/wps/portal/3M/en_US/3MC3SD/Wound-Care/Products/Wound-Care-Supplies/~/Critical-Chronic-Care?N=6219+6219&rt=r2

2. Policies and Procedures Saskatoon Health Region
Title: **COMPRESSION BANDAGING OF THE LOWER LIMBS – MULTILAYER (MAINTENANCE)**
Number: **C-138**

3. Policies and Procedures Saskatoon Health Region
Title: Compression Bandages-Maintenance of
I.D. Number: 1038

Multilayer Compression System

Skills certification

Name: _____

Location of employment:_____

1. Has completed the Multilayer compression Bandaging Learning Package.
   Date _____Manager/instructor_____
2. Has completed a hands on in-service on application on a volunteer participant.
   Date_____Instructor:_____
3. Has completed 2 supervised applications of 3m Coban™ 2 Layer Compression Wrap on a patient/client. The Certified Health Care Professional may request further supervision if needed.

Date skill preformed:	Instruction and Comments	Signature of Coban Certified Health Care Professional

Date:

Signature: _____

Supervising Certified Nurse/Health Care Professional Signature:

Proof of Annual recertification on Page 2

Date:	Type of recertification	Signature
	☐ Review of Learning package ☐ Review of application videos www.3M.ca/Coban2Layer ☐ Hands on supervised clinical application ☐ Other_______________________________________	
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