N.Z. WOUND CARE SOCIETY INC.

# TISSUE ISSUE

**Issue Five**
**July 2008**

**New Zealand Wound Care Society Newsletter**
For more information & membership forms visit: www.nzwcs.org.nz

**Editor of Tissue Issue**

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**What is the New Zealand Wound Care Society?** The NZWCS is a voluntary organisation made up of health care professionals from a variety of disciplines who share a common interest in wound management. As an organisation it gives its members an opportunity to share experience, expertise and knowledge providing a forum to network with other members throughout the country.

Currently there are fourteen branches New Zealand-wide. Each has an area coordinator and a national committee member. The area coordinator is responsible for coordinating meetings and seminars for the local branch members, while the national committee member represents each branch at a national level. In some areas these duties are undertaken by the same volunteer.

**Inside this issue:**


- Welcome!
- President's Report
- Area Co-ordinator Feedback
- Vacuum Assisted Closure Questions and Answers


Welcome to the fifth publication of Tissue Issue.

Our congratulations to Rebecca who has had a beautiful baby girl Charlotte! Rebecca will be on maternity leave until February 2009 so please forward any Tissue Issue contributions (e.g. case studies or practice tips to inspire!) to Mandy.

This issue is focused on Topical Negative Pressure therapy with questions and answers provided by Intermed on Vacuum Assisted Closure (or VAC as we commonly know!). Intermed have also generously sponsored this newsletter to be printed in colour and sent out to all members, thank you Intermed.

Check out the European Wound Management Association position document titled 'Topical Negative Pressure in Wound Management' from http://www.ewma.org/ go to 'publications' then 'position papers and conference proceedings' then voila click on the document!

## Presidents Report

***From the President's chaotic desk!***

This is just a brief report, as those of us lucky enough to go to Toronto have only just returned and there will be reports on the conference appearing on the website in the next 6 weeks from most of us I hope. Our other main work is around the Pressure Ulcer working party, which Carol Tweed is leading and the Leg Ulcer working party which Mandy Pagan is leading, reports on these groups can be found on the committee meeting minutes.

Membership numbers remain healthy and you will all have received your 2008/2009 renewal notices by now. I am also looking at our constitution, so that we can bring it up to date at the next AGM in September. There are a few issues around commercial membership which also need to be ironed out, in terms of who is covered when commercial membership is taken out. You should also all have received the scholarship application reminder; the closing date is end of October. All the application forms can be downloaded from the website.

Wellington had a very successful study day recently and all branches have been active in promoting the Society. Planning is well under way for the 2009 conference in Napier 14-16 May, so put that date in your diary if you have not already done so.

As some of you know, I will be standing down as President at the next AGM, so you need to start thinking who you wish to nominate to take over. Forms will be available soon, but don't forget you cannot nominate someone without their consent! If we receive more than one nomination, there will be a vote at the AGM.

Thanks again to Mandy and Rebecca for working hard to get Tissue Issue out – don't forget that they need and welcome articles from members.

Jenny Phillips
President
NZWCS

## Area Co-ordinator Feedback

**Dawn Sutton** Canterbury Region – Feb/April Education Evening
Canterbury has had an excellent start to our educational calendar for the year. Margaret Conaglen (Clinical Nurse Educator, Plastic Surgery, Christchurch Hospital) delivered an excellent talk on 'Burns'. The feedback was very positive.
Canterbury held its second education evening for 2008 on Wednesday 23 April. The guest speaker was Dr Paul Maurice – Consultant Dermatologist from the Canterbury District Health Board. The title of his talk was – 'Leg Ulcers – Not Always Vascular'. Approximately 80 people attended at the new venue of the Rolleston Lecture Theatre at the Canterbury School of Medicine. It was an excellent talk and the feedback has been extremely positive.

Due to high demand for attendance for previous wound care study evenings the Canterbury Branch has moved its talks from the Ballroom at Nurse Maudes. This venue had served very well for a number of years and Nurse Maudes had always kindly given us the use of the ballroom free of charge. However, now with the bigger venue we hope to be able to offer the educations evenings to a wider audience.

In addition to the change of venue, we had a further exciting development. We were approached by Timaru to ask if we would video-link with them allowing their healthcare workers to be able to benefit from the lecture without a two-hour each way drive. The link for the education went extremely well (despite a few sound issues). Approximately 20 people attended in Timaru. We have now been approached regarding further links to other areas.

Due to part of the regional working group being away in June the previously scheduled education evening has been cancelled. The next education evening will now be held in August. This will take the form of a 'Product Fair' where 6 company reps will talk about their products and have exhibition stands for attendees to view the products discussed. Hope to see you there.

Val Sandston and Sarah Glass at the registration desk.

Dawn presenting

**Mandy Pagan** Southland Region – June 19th 2-hour Education Session
We had fantastic interactive session on wound assessment applying TIME, product selection and a practical session on dressing application techniques presented by Mandy and facilitated by Marie Plank, Robyn Kelly and Katharine Clarkson. 36 attendees from Southland attended this session including Podiatrists, Rest Homes, and Nurses working in primary and secondary health sectors.

# V.A.C.® Therapy Questions

1. **How does V.A.C.® Therapy work?**
   V.A.C. Therapy may:
   - Directly stimulate cell proliferation
   - Increase local blood perfusion
   - Reduce localised oedema
   - Promote granulation tissue formation
   - Remove wound exudate that can inhibit wound healing
   - Provide a closed moist wound healing environment

2. **How long has V.A.C. Therapy been used for managing wounds?**
   V.A.C. Therapy has been used for managing wounds since the mid 1980's on a research basis (animal studies), while significant use in humans began in the mid 1990's. To date, over 2,000,000 patients have been treated with V.A.C. Therapy since its introduction into clinical practice.

3. **Is V.A.C. Therapy supported by evidence based practice?**
   Yes. There are currently 16 published RCT's relating to V.A.C. Therapy with over 450 published articles, abstracts and book entries.

4. **What are the contraindications to V.A.C. Therapy?**
   The current contraindications for V.A.C. Therapy are:
   - Malignancy in the wound

- Untreated osteomyelitis
- Non- enterocutaneous and unexplored fistulae
- Necrotic tissue with eschar present
- Sensitivity to silver (V.A.C. GranuFoam Silver only)
- Direct placement of V.A.C. dressings over exposed vital structures (i.e.: tendons, ligaments, blood vessels, anastomotic sits, organs and /or nerves)

5. **The Therapy Unit hire and product consumables seem very expensive, is V.A.C. Therapy cost effective?**
Yes. V.A.C. Therapy may provide a reduction in overall treatment and hospitalisation costs. For more information please see the following articles:

Flack S, Apelqvist J, Keith M, Trueman P, Williams D (2008). An economic evaluation of V.A.C. therapy compared with wound dressings in the treatment of diabetic foot ulcers. *Journal of Wound Care, 17*(2), 71-78

Moues CM, van den Bemd GJ, Meerding WJ, Hovius SE (2005) An economic evaluation of the use of TNP on full-thickness wounds. *Journal of Wound Care 14*(5), 224-227

Jeroen DD Vuerstaek, Tryfon Vainas, Jan Wuite, Patty Nelemans, Martino HA Neumann, Joep CJM Veraart (2006). State-of-the-art treatment of chronic leg ulcers: A randomized controlled trial comparing vacuum-assisted closure (V.A.C.) with modern wound dressings. *Journal of Vascular Surgery 44*(5), 1029-1037.

6. **When should V.A.C. Therapy be discontinued?**
When your predetermined V.A.C. Therapy goals have been met and/or if the wound shows no signs of progress for one to two consecutive weeks and all efforts to encourage healing have failed.

7. **Using the 'TIME' acronym of wound bed preparation what does V.A.C. Therapy do in each area?**
*Tissue* - V.A.C. Therapy may encourage granulation tissue growth – an increase in perfusion to the wound bed may support this.
*Inflammation and Infection* - V.A.C. Therapy may remove wound exudate that can inhibit healing. V.A.C. Therapy can be used on wounds where osteomyelitis is being actively treated.
*Moisture* - V.A.C. Therapy may remove oedema and wound exudate that can inhibit healing. V.A.C. Therapy is designed to provide a moist wound healing environment.
*Edge* - Macrostrain is exerted by applying V.A.C. Therapy - this can assist with overall wound volume reduction. V.A.C. Therapy enhances granulation tissue formation, this provides the scaffolding necessary to allow epithelialisation to occur encouraging contraction of the wound margins.

8. **Can V.A.C. Therapy be used on wounds with lymphatic drainage?**
Yes. There are a few case studies that are documented to support this practice. One reference is: Greer SE, Adelman M, Kasabian A, Galiano RD, Scott R, Longaker MT (2000). The use of subatmospheric pressure dressing therapy to close lymphocutaneous fistulas of the groin. *British Journal of Plastic Surgery (53)*6, 484-487.

9. **What technique can be used if the size of the wound is smaller than the T.R.A.C.® pad?**
   - Protect the intact peri-wound skin with a hydrocolloid or V.A.C. drape (approx 3 – 5cm).
   - Cut the foam to fit the size and shape of the wound, placing the foam in the cavity.
   - Cut a larger piece of foam dressing approx 4-6cm in diameter and place it on top of the first piece of foam. Apply the V.A.C. Dressing over the pieces of foam.
   - Cut a hole in the drape and apply the T.R.A.C. Pad directly over the hole (approx 1-2cm).
   - Connect dressing tubing to canister and commence therapy.
   - You can also refer to p.17 of the V.A.C.® Therapy Clinical Guidelines.

10. **What is the bridging technique?**
Bridging means treating two wounds, in close proximity, of similar pathologies, on the same patient, with one V.A.C. Therapy Unit. Refer to p.16 of V.A.C.® Therapy Clinical Guidelines.

11. **When would I use the Y-connector?**
When the distance between wounds is too great to bridge, for example, bilateral venous ulcers. Please refer to p.16 of V.A.C.® Therapy Clinical Guidelines.

12. **What anatomical dressing can be used to treat heel ulcers?**
A V.A.C.® GranuFoam® Heel dressing has been specifically designed for this purpose. Please contact your InterMed Representative for more information.

13. **What can be used to protect peri-wound skin?**
Generally a skin barrier wipe, if the skin is unbroken. Some clinicians use a hydrocolloid.

If the patient's skin cannot tolerate frequent dressing changes it may not be necessary to remove the entire V.A.C. Drape. Instead, simply cut drape around the foam, remove the foam, cleanse as per local policy, replace the foam and reseal with an additional strip of drape. This drape may be left for one dressing change to protect the skin from unnecessary stripping.

14. **What would you do if you noted minimal changes in wound size?**
You could try:
   - Cutting the foam slightly smaller than the wound edges with little depth to enhance inward epithelial migration.
   - Providing a therapeutic pause by interrupting V.A.C. Therapy for 1 – 2 days, then restart.
   - Changing therapy settings from continuous to intermittent or vice versa.
   - Evaluating nutritional status and supplement as necessary.
   - Making sure the patient's pressure relief is adequate.

15. **If a patient experiences pain during treatment what options do you have?**
Suggest:
   - Changing from Intermittent to Continuous Therapy
   - Reducing the Intensity setting on the Therapy Unit
   - Changing the foam to V.A.C.® WhiteFoam
   - Ensuring the patient received adequate analgesia
   - Using an non adherent, open woven dressing beneath the V.A.C. GranuFoam®
   - Considering flushing lignocaine 1% (diluted in normal saline) down the tubing before dressing removal
   - Reducing the negative pressure

   Note: That if there is a sudden increase/change in pain character this needs to be investigated.

16. **If a patient experiences pain during foam removal what should I do?**
Suggest:
   - Turning V.A.C. Therapy off one hour before the dressing change
   - Introducing 10-30mls sterile saline into tubing and leave in situ for 15 – 30 minutes
   - Using an interface to reduce over granulation into foam
   - If there is significant discomfort, may consider introducing 1% lignocaine solution down tubing, and wait 15 – 30 minutes

17. **With wound undermining or shelving, at what depth and thickness should the foam be placed?**
As a general principle, undermining and tunnelling should be treated no differently than any other part of the wound. i.e. the aim is still to maximise contact between foam and wound bed.
1. Place the foam gently into the undermined areas all the way to the distal portion.
2. Pull the foam out 1–2cm, leaving some foam in the wound to communicate with the foam in the wound bed. This specific placement leaves the distal portion of the undermined area clear of foam, allowing the distribution of higher pressures to collapse the free areas of undermining together, encouraging the wound cavity edges to granulate from the distal portion forward.
3. Always use Continuous Therapy.

18. **What are the characteristics of V.A.C.® WhiteFoam?**
The white, polyvinyl alcohol (PVA) foam dressing is a dense, open pore foam with a high tensile strength that is ideal for use in tunnels and areas of undermining.
It is hydrophilic (or moisture-retaining) and is packaged pre-moistened with sterile water. Its properties help to reduce the likelihood of adherence to the wound base.
V.A.C. WhiteFoam Dressing is generally recommended for use in wounds where the growth of granulation tissue into the foam needs to be controlled or when the patient cannot tolerate V.A.C. GranuFoam.
Note a minimum pressure setting of 125mmHg is recommended when using V.A.C. WhiteFoam.

19. **Is an antimicrobial foam available?**
Yes. V.A.C. GranuFoam Silver® was launched in New Zealand on 1 June 2008. Please see the flyer with this Issue, or contact your InterMed Representative for more information.

**If you are ever in doubt please refer to the V.A.C.® Therapy Clinical Guidelines or contact your InterMed Representative.**

**Next Issue November 2008 (article deadline 1st October)**
***This is YOUR newsletter so get involved and contact Mandy with any questions, ideas, tips, case studies or websites of interest***

*The views expressed in this newsletter are not necessarily the ones held by the New Zealand Wound Care Society*