

# Wounds UK

## *Summer ball & Awards 2009*

The 2009 Wounds UK Awards Ceremony and Summer Ball took place on Friday 12 June at Tatton Park, Cheshire and was hosted by Darren Gough, Cricketer and TV Star. Several hundred guests gathered to congratulate the winners and celebrate the achievements of all those working in wound care in the UK.

The 2009 Wounds UK awards offered the wound healing community the opportunity to recognise and celebrate those advancing practice. With more than 200 high quality entries to the awards, the panel of judges, led by Pam Cooper, Clinical Manager, Wounds UK, had a difficult task singling out finalists for each award category. All the entries demonstrated that the field of wound care is making good progress and continuing to improve the lives of patients with wounds, despite the pressures placed on clinical services and resources.

The evening began with guests drinking Pimms on the terrace of Tatton Park Mansion overlooking 50 acres of formal gardens and some of the 1000 acres of surrounding deer park. Dinner followed in the Tenant's Hall, and guests were entertained by comedy act Men in Coats. After coffee, Darren Gough held an informal and informative Q and A session! The award ceremony, hosted by David Gray, followed with over 10 categories of awards each of which had three winners. Trophies were presented to the winners by Darren Gough. The awards ceremony culminated with the Major Contribution to Wound Healing Award, which was presented to Dr George Cherry, Member of the Clinical Faculty of Medicine, Oxford University Medical School and Chairman, Oxford International Wound Healing Foundation, for his contribution to the field of wound care and for encouraging and developing, both nationally and internationally, many educational initiatives to further this area of care.

Visitors to the Wounds UK website voted for this award, and thank you to all who voted. The evening culminated with lots of dancing and one lucky clinician being swept around the dance floor by Darren Gough, also Winner of the BBC's Strictly Come Dancing.

Wounds UK would like to take this opportunity to thank all the clinicians who submitted an entry for their contribution, and the sponsors of the awards. Without this commitment to the evening, the important work of the wound care field in the UK could not be recognised and celebrated.

Entry forms for the 2010 awards will soon be available on the Wounds UK website and we encourage all clinicians active in practice development, research and audit to enter and share their accomplishments with colleagues.

We look forward to welcoming you to the Wounds UK Awards 2010!













## Innovations in Dermatology

Sponsored by  


Presented by **Samantha Howell**

HIGHLY COMMENDED

**Sara Burr** Supporting pharmacists in the management of skin conditions

**Sandra Lawton** Stakeholders experience of teledermatology in a nurse-led community clinic: a case study

WINNER

**Carrie Wingfield** Review of a lower limb cellulitis clinic



## Innovations in Lymphoedema and Chronic oedema

Sponsored by  


Presented by **Rob Holder**

HIGHLY COMMENDED

**Justine Whittaker** Challenging existing practice

**Rebecca Billingham** Bandaging workshops for lymphoedema

WINNER

**Jackie Stephen-Haynes** Audit and the development of a strategic approach to the management of chronic oedema



## Innovations in Compression

Sponsored by  


Presented by **Natalie Lance-Tardy**

HIGHLY COMMENDED

**Jane Tait** The management of the lower limb

**Professor Hugo Partsch** Best practice for the management of lymphoedema

WINNER

**Alex Munnoch** The use of liposuction in the management of chronic lymphoedema



## Innovations in Diabetic Foot Ulcers

Sponsored by  


Presented by **Helen Phillips**

HIGHLY COMMENDED

**Samantha Haycocks** Use of a dynamic pathway to facilitate care in the diabetic foot ulcer

**Caroline McIntosh** The need for a collaborative approach between nurses and podiatrists in wound care

WINNER

**Stella Vig** Implementation of a fast-track referral system



### Innovations in a Reduction in Wound Infection

Sponsored by  
 smith&nephew

Presented by **Simon Beard**

HIGHLY COMMENDED

**Kathy Leak** The use of AMD in infection

**Michelle Beer** Practitioner awareness of PVL

WINNER

**Heather Newton** A new strategy to fight infection



### Innovations in Surgical/Cavity Wounds

Sponsored by



Presented by **Kevin Mearns**

HIGHLY COMMENDED

**Heather Hodgson** Using advanced mapping technology to chart wound healing in a dehisced abdomen

**Susan Harris** Developing photographic care plans to facilitate better patient outcomes

WINNER

**Robert Whistance** Early tissue viability team involvement reduces hospital stay in patients with dehisced or open abdominal wounds



### Innovations in Natural Wound Care

Sponsored by



Presented by **Mark Allatt**

HIGHLY COMMENDED

**Sylvia Hampton** The role of manuka honey in treating intractable wounds

**Tanya Grant** The use of antibacterial medical honey for the treatment of pilonidal sinus post incision and drainage

WINNERS

**Val Robson, Susanna Dodd, Steve Thomas** Results of a RCT comparing antibacterial honey with a standard treatment in the management of wounds



### Innovations in Patient Care

Sponsored by



Presented by **Lawrence Coleman**

HIGHLY COMMENDED

**Pauline Gilroy, Anne Fowler** Development of an innovative project looking at pressure ulcers

**Ellie Lindsay** Patients first — the Leg Club Foundation

WINNERS

**Kathryn Vowden, Peter Vowden** Audits — Ethnicity: influence on wound prevalence as revealed by district wide audit; Dressings wounds: what happens in the real world; Pressure ulcers: results of a district wide audit





### Innovations in Leg Ulcers

Sponsored by



Presented by **Ian Grant**

HIGHLY COMMENDED

**Anna Gibbins, Lynn Davis** *Look after your legs*

**Tracey Shipton** *A review of service provision*

WINNER

**Robin Cooper** *Electronic leg ulcers*



### Innovations in Topical Negative Pressure

Sponsored by



Presented by **Nicky Greenway**

HIGHLY COMMENDED

**Lorraine Grothier** *Cost comparison of the use of Vista negative pressure wound therapy versus conventional therapy in a grade III pressure ulcer*

**Jacky Edwards** *Managing skin grafts with Wound ASSIST*

WINNER

**Jean-Pierre St Mart** *The use of TNP in war conflict*



### Innovations in Primary Care

Sponsored by



Presented by **Claire Weston**

HIGHLY COMMENDED

**Katherine Kidman** *Development of a community diabetic foot clinic*

**Linda Primmer** *The use of TNP in the community*

WINNER

**Jacqueline Griffin** *Introducing Datix reporting to monitor pressure ulcers*



### Major Contribution Award

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Presented by **Sara Wilson-Gallagher**

WINNER

**Dr George Cherry** *has been a pioneer in the field of wound healing for many years. Since 1982 he has been in charge of the wound healing programme in Oxford and has supervised research nurses, technicians, visiting clinicians and students both from the University of Oxford and overseas. He is a member of the Faculty of Clinical Medicine, Oxford and Honorary Professor to the Trauma Center Postgraduate Medical College and 304th Hospital, Beijing, China and has held key roles in the European Tissue Repair Society (ETRS) and European Wound Management Association (EWMA). As a renowned international speaker he has made major contributions to wound care education. Together with his wife, Chris, he has developed events and conferences, including the annual European Pressure Ulcer Advisory Panel (EPUAP) annual meetings*

# 2009 Award winning abstracts

## Innovations in Dermatology

sponsored by Almirall



### Review of a lower limb cellulitis clinic

Carrie Wingfield

#### Introduction

Lower limb cellulitis is a common condition with associated morbidity and mortality which requires significant input from acute services. Across the UK, hospital admissions for the administration of intravenous antibiotics translate into an average of eight bed-days stay per patient. Moreover, risk factors for recurrent cellulitis can include an underlying dermatological condition such as tinea pedis and varicose eczema. This may be missed or misdiagnosed by physicians other than dermatologists. A direct referral system will improve the patient's pathway and ensure that they are seen by the most appropriate person.

#### Development of practice

A dedicated dermatology lower limb cellulitis clinic was set up in March 2007 at the Norfolk and Norwich University Hospital as a novel service development in an NHS setting. A separate clinical area was provided within the dermatology department manned with a specialist nurse and medical team which include a senior house officer and consultant dermatologist. General practitioners, Emergency Medicine (EAUM) and Accident & Emergency were informed of the service, its criteria and operational hours. The criteria ensures that patients presenting with two or more signs of sepsis are triaged to EAUM and are not suitable for dermatology. All lower limb systemically well patients are accepted. Communication was set up with the local primary care trust to establish an intravenous service in the community. All patients who are diagnosed with lower limb cellulitis requiring intravenous (IV) therapy will receive their first dose in the clinic and then if appropriate the next two doses at home. On day four they are reviewed in the clinic and stepped down to oral antibiotics if appropriate. Ceftriaxone is used as this is a once daily IV, patients unable to tolerate this drug would have to be admitted for alternative antibiotic treatment four times a day.

#### Outcomes observed

Our initial pilot audit showed evidence of benefits as summarised below:

- ▶ 29% patients referred to clinic did not have cellulitis, alternative diagnosis ranging from stasis eczema (47%), erythema nodosum, psoriasis, vasculitis and septic arthritis
- ▶ 46% of patients had a secondary dermatological diagnosis. Of those 39% were diagnosed with stasis eczema and 9% with tinea pedis
- ▶ Through the savings made by this service in treating patients as outpatients rather than admissions the trust funded a second senior house officer to ensure smooth running of the service. Out of 439 patients seen, 39 were admitted,

potentially prior to this service all 439 could have been admitted. The trust saved 2,976 bed days or £744,000. There is also the benefits of patients being less exposed to hospital acquired infections

- ▶ The intravenous community service has been successfully picked up by the local primary care trust enabling the service to be sustained and achieve a service and patient pathway closer to the patient's home. The IV service has been able to establish itself on the back of the cellulitis project and is now made available to other specialities such as orthopaedics and respiratory
- ▶ We have been able to recruit patients into a clinical network trial (PATCH) looking at long-term use of low dose penicillin
- ▶ Patient satisfaction of the service was between 95–100% in the first quality audit.

#### Discussion

Our analysis of the service at this stage is that the service is only as good as the integration between primary and secondary care. As a department we recognised that the service is also dependent on a well-resourced clinic in terms of access to specialist nurses, medics and consultant dermatologists. Good relationships are essential between EAUM, A & E and other services in secondary care such as the deep vein thrombosis (DVT) clinic and rheumatology. We are aiming to shorten the patient's pathway so that they see the most appropriate clinician for their condition and subsequent management. We are also conscious of the amount of lower limb cellulitis patients who go on to have recurrent episodes of cellulitis which can lead to lymphoedema. By diagnosing dermatological primary cause we hope to reduce this outcome.

#### Conclusion

The success of our dermatology-based service will hopefully pave the way for similar structures to be established within NHS trusts and subsequently improve the diagnosis and management of cellulitis. These recommendations have previously been highlighted in the 2005 CREST guidelines. The service promotes dermatology as an integral part of general medicine and has its place in secondary care. Our service is also beneficial to dermatology trainees as it provides valuable exposure to acute medicine. The service requires more in the way of audit and a cost-effectiveness study, which we hope to address as the service evolves. We are also looking to writing national guidelines on the treatment and management of lower limb cellulitis. The service produced its second audit and poster at the British Association of Dermatologists (BAD) Conference in Glasgow July 2009.



**Audit and the development of a strategic approach to the management of chronic oedema**

Jackie Stephen-Haynes, Consultant Nurse and Senior Lecturer in Tissue Viability for Worcestershire Primary Care Trusts and the University of Worcester

**Introduction**

Chronic oedema is an accumulation of fluid, proteins and other macro-molecules leading to tissue swelling, skin changes and fibrosclerosis that has lasted longer than three months. It is a symptom of many different clinical conditions and potentially affects over 100,000 people in the UK (Moffatt et al, 2007). Chronic oedema has become an increasing issue for all healthcare professionals (Linnit, 2005). Importantly, appropriate management can be highly effective and contribute significantly to patients' quality of life. This abstract discusses an audit, its outcomes and the development of a strategic approach to the management of chronic oedema within a PCT, involving lymphoedema and tissue viability staff and a lymphoedema nurse employed by a manufacturing company working in partnership.

**Development of practice**

An audit was undertaken by the consultant tissue viability nurse in 2008 to determine the care currently provided by the Worcestershire Primary Care County Tissue Viability team. This consists of district nurses, community staff nurses, practice nurses, podiatrists, care home staff, community hospital staff nurses and a TVN. Clinical governance approval was given to undertake the audit and 22 questionnaires were administered. Of the 22, 12 had undertaken an accredited leg ulcer course, 10 had not. A number of challenges in providing care for patients with chronic oedema have been identified, including assessment, management of odour, exudate, skin and pain. The most significant challenging aspect was the management of oedema/exudate/lymphorrhoea. Three members of staff had the ability to apply above-knee/full-leg compression, and 19 were able to apply below-knee compression. Following the audit, the identified key challenge areas have been utilised to inform the education plan for chronic oedema in primary care, which was led jointly by lymphoedema and tissue viability specialists. A chronic oedema management guideline, patient pathway, specific full-leg bandaging regimen, competencies and a care pathway have all been developed and are being implemented across the PCT through a strategic educational plan which includes several modes of dissemination including Leg Clubs®, accredited tissue viability and leg ulcer courses, annual care home conference, pre-registration conference, the annual TV conference and eight educational updates. The education includes both a theoretical and practical element. A database is kept of all attendees and staff who attend, as well as their competencies.

**Outcomes observed**

The PCT covers a population of 555,000 and increasing numbers of patients with chronic oedema can be seen within

the lymphoedema service, being delegated to staff with newly-developed chronic oedema skills. An audit of all patients with chronic oedema has been developed which will include numbers of patients treated and clinical outcomes.

**Discussion**

200 staff have been educated and staff are acknowledging that lymphoedema/chronic oedema needs to be managed in a different way. This has led to an increased continuity of care within the PCT with patients now being assessed by tissue viability/lymphoedema and being referred to local staff for appropriate re-assessment, application of full-leg compression hosiery using a cohesive short-stretch bandage, as well as provision of appropriate skin care.

Staff are receiving an extension to their previously developed leg ulcer skills which allows for more comprehensive treatment of patients with leg ulceration/chronic oedema. A data base of competent staff has been developed and is provided to the PCT directors.

While it is difficult to estimate the number of individual patients who may have developed a leg ulcer following untreated chronic oedema, the individual care studies indicate that this would be hundreds of patients. Maintaining the on-going audit database will assist in determining the impact over several years.

**Conclusion**

The audit data suggests that care for patients with chronic oedema has improved and will have long-term health benefits. There is strong communication and collaboration across tissue viability and lymphoedema services in the PCT, and while to date this has been successful, it is recognised that there is scope for further development, particularly in relation to patient involvement and a patient questionnaire is under development exploring the patient experience. This will be used to develop future practice in relation to chronic oedema care. Other healthcare professionals such as GPs and physiotherapists are also recognising their role in contributing to a positive outcome for the patient and cost benefit analysis is being undertaken.

**References**

Linnit N (2005) Lymphoedema: recognising, assessment and management. *Wound Care*, March supplement, S20-6  
 Moffatt C, Franks P, Doherty D et al (2003) Lymphoedema: an underestimated health problem. *QJ Med* 96(10): 731-8





## Implementation of a fast-track referral system

Stella Vig, Stella Vig, Lea Bailey, Helen Rafferty and Josh Derodra, Diabetic, Vascular and Wound Care Centre

### Introduction

Diabetic foot ulcers (DFU) are one of the most demanding complications of diabetes. The prevalence of diabetes in Croydon is 4.11%, with around 15,400 patients with diabetes registered with Croydon GPs (QMAS 08). The prevalence of diabetes is increasing exponentially and major amputations remain high cost to patients with loss of independence and life. Amputation has important effects on quality of life and poses important demands on the healthcare system in terms of manpower and costs. The St Vincent Declaration (1989) agreed to reduce worldwide diabetic amputation rates by half and a Hi-Lo amputation ratio was suggested as an additional quality measure (high amputation was defined as an amputation above the ankle).

### Development of practice

This study looked at the impact of the implementation of a fast-track internal referral pathway at a district general hospital on amputation rates and Hi-Lo amputation index between 2006 to date. In addition, data was collected on average length of stay (ALOS), as Mayday University Hospital hotel bed costs are £274 and, therefore, an increased length of stay decreases the income stream within payment by results.

All patients with complex wounds were referred to the wound care team on admission from 12/05 and cohorted initially in the vascular ward and then in the diabetes, wound care and vascular centre. The wound care team consisted of vascular surgeons, wound care nurse specialists, podiatrists, diabetologists, physiotherapists and microbiologists. This pathway allowed rapid identification and aggressive management of patients with diabetic foot complications. Infection was rapidly treated within trust DFU antibiotic guidelines, drained and revascularisation undertaken if appropriate with surgical or radiological intervention. Diabetes care and mobility were optimised. Advanced wound care therapies were used as appropriate. Patients were offloaded as appropriate and were aggressively managed as outpatients as early as clinically safe. Discharge planning was enabled with a weekly multidisciplinary team meeting.

### Outcomes observed

Table 1 indicates the numbers of amputations observed 1/2006–12/2008:

Year	AKA	BKA	T/ knee	Ist	Other	Mid	Debride-ment
2006	18	8	1	6	5	1	37
2007	11	9	4	9	13	6	50
2008	7	12	0	12	16	5	35

Table 2 indicates the change in Hi-Lo ratio:

Year	High	Low	Hi-Lo ratio
2006	27	12	2.25
2007	24	28	0.86
2008	19	33	0.58

In the two-year period, the mean length of stay for patients undergoing above-knee amputations was decreased by 28 days (60–32). Patients undergoing below-knee amputations continued to have a long length of stay, 91–93 days. Patients undergoing 1st amputation were discharged home 15 days earlier (36–21).

### Discussion

The data suggest that this change of practice has had an effect on major amputation rates. Major amputations were reduced with an increase in numbers of lower level amputations and debridements.

Patients undergoing major amputations are cost heavy and do not bring in revenue for the trust. These patients also have personal costs, as these operations carry a high mortality, loss of independence and decreased quality of life. Diabetic patients who develop complex diabetic foot problems have a risk of amputation with a high cost both to the patient and the health economy. Despite aggressive management the ALOS cannot be improved in these patients to ensure revenue to the trust.

Major amputations may be further preventable by allowing a fast-track service of those with complex diabetic foot wounds to the DFU service providers. This would decrease the need for costly interventions and allow an improved quality of life for the patient with a high risk diabetic foot.

### Conclusion

Aggressive management has shown a 30% reduction in major amputation with a threefold increase in minor amputations. The Hi-Lo ratio has reduced from 2.25 to 0.58. This pathway has not decreased ALOS sufficiently to ensure these interventions are revenue generators for the trust. Patients with complex diabetic foot wounds are at a high cost to the patient and the trust. Improvement in quality of life and decreased cost to the health economy can only be facilitated by prevention of these high cost problems, thereby reducing the need for secondary care admissions. The additional impact of rapid GP referral within 48 hours is now under way.



## A new strategy to fight infection

Heather Newton, Nurse Consultant in Tissue Viability, Royal Cornwall, Truro

### Introduction

In 2003 the Department of Health set out a clear direction for NHS organisations on the actions required to reduce hospital-associated infections and to curb the proliferation of antibiotic resistant organisms. NHS organisations now undertake surveillance for serious bloodstream infections caused by *Staphylococcus aureus*, including MRSA. Targets are set and monitored at a national level. In the author's trust, an acute secondary care health provider, there has been a significant reduction in MRSA bacteraemias relating to line sites. However, last year concerns were raised about the high level of MRSA bacteraemias caused by wounds. During April to December 2008, eight patients developed a bacteraemia that through root cause analysis was found to be associated with their wound.

### Development of practice

Initially the tissue viability team were made aware of the increased incidence of MRSA bacteraemias through involvement in the root cause analysis process. It was becoming clear that patients were not screened for MRSA if they had a non-healing, chronic wound, nor was the wound appropriately treated if they had an MRSA infection. A wound audit in November 2008 identified that there were 191 patients with wounds, 31% of the total patient numbers. Of these, 43 patients were at a higher risk of MRSA. A collaborative whole systems approach was taken involving the tissue viability and infection control teams, together with microbiologists to develop a pathway for managing patients with MRSA and wounds. A strategy document was written and agreed. The wound dressing technique used by staff was reviewed and a decision was made that an aseptic non-touch technique (ANTT) would be the one of choice for chronic wounds. First dressing changes for surgical wounds would continue to be undertaken using an aseptic technique.

A flow chart was devised to highlight the need to swab wounds during the MRSA screening process and when wounds showed signs of clinical infection. The use of silver dressings was advocated as first-line management. All clinical areas were provided with a laminated copy of the chart and an educational resource pack to support the training. Silver dressings were kept in a central location to ensure appropriate use and enable monitoring of the expenditure.

### Outcomes observed

- ▶▶ The numbers of staff who had training on the MRSA flow chart and how to use the silver dressings
- ▶▶ The amount of silver dressings used and from which areas of practice
- ▶▶ The number of MRSA bacteraemias associated with wounds in the quarter following development of the strategy
- ▶▶ The appropriate management plan when patients were identified as having MRSA in a wound.

### Discussion

The number of patients who developed life-threatening bacteraemias within the trust was unacceptable and a robust plan to reduce the incidence was introduced. Root cause analysis identified that the majority of patients with MRSA infected and colonised wounds had chronic wounds. These patients are predominately elderly and therefore move between care settings for treatments of other comorbidities. It is difficult to identify the exact time that they develop MRSA and also the real cause of the bacteraemia. Working closely with the infection control team to raise the awareness of correct universal precautions and the use of the ANTT for undertaking wound dressings is vital in reducing bacteraemias associated with wounds. Through mandatory training all staff within the trust have received infection control updates, and, together with the enhanced education regarding screening and swabbing of infected wounds, the risk of cross-infection should be reduced.

One might argue that keeping the silver dressings centralised does not allow free access for staff when required, however, using this approach ensures that the usage is appropriate and the dressings are used for the appropriate length of time. Recording the number of dressings used and the type of wounds and clinical location enables a wider audit of practice to be undertaken.

Working collaboratively with the public health team ensures that swab results are being acted upon appropriately and will identify further training needs. A previous audit undertaken by the laboratory staff looking at leg ulcer swabs identified that at least 50% of the swabs did not have clinical indicators documented, therefore, it will be of interest to see if this has improved in relation to the MRSA swabs. The key to the success of this strategy is the appropriate management of the patients' wounds to reduce the bacteraemias. The audit of the management plans will provide the evidence for the trust.

### Conclusion

Approximately 30% of the general population are colonised by *Staphylococcus aureus* with this being carried as MRSA in the hospital population (DoH, 2003). As MRSA bacteraemias are associated with increased mortality, it is imperative that organisations develop strategies to reduce the risk and implement the changes to enhance the quality of care for patients. The author's trust was the second worst in the country for MRSA bacteraemias despite a lot of hard work. This has been demoralising for the staff, however, with enhanced education and support, the teams are ready to embrace the challenge.

### Reference

Department of Health (2003) *Winning ways, Working Together to Reduce Healthcare Associated Infection in England*. DoH, London





## Early tissue viability team involvement reduces hospital stay in patients with dehiscence or open abdominal wounds

Robert Whistance, Surgical Research Fellow; James Dilley, F2 Doctor Paediatrics; Eve Harrison, Staff Nurse in Critical Care, all at North Bristol Trust, Bristol

### Introduction

The open abdomen is a disastrous complication of abdominal surgery and one for which no consensus on 'best' management exists. It may arise as a result of surgical laparostomy, where the surgeon is unable to close the abdomen, or from full-thickness laparotomy wound dehiscence. Raised intra-abdominal pressure, sepsis and poor nutrition are believed to be important aetiological factors. Sufferers of the open abdomen often need to be managed in an intensive care setting and require prolonged hospitalisation provided they survive. This results in significant costs in terms of personnel and equipment, resources that are scarce in today's National Health Service. A variety of treatment modalities exist including the Bogota Bag, vicryl mesh and vacuum-assisted closure (VAC) therapy. The aim of this study was to investigate the effect of tissue viability nurse team (TVNT) involvement on the outcome of patients with open abdominal wounds.

### Method

Patients with full-thickness laparotomy wound dehiscence or surgical laparostomy were identified retrospectively from tissue viability nurse records at North Bristol Trust between 2000 and 2007. Patients were excluded if they had only partial-thickness wound dehiscence, or did not have a midline laparotomy incision. Patient case notes were obtained and audited using a data extraction tool that anonymously documented patient information. Pre-operative risk factors were recorded (sepsis, albumin <35g/dL, ASA score  $\geq 3$ , immunosuppression, malignancy, diabetes, smoking status and age). Important peri-operative factors were also recorded (reason for surgery, type of operation, elective or emergency, means of primary closure). The post-operative period was also scrutinised (time to TVNT involvement, hospital stay, wound management instigated, wound size, complications, mortality). The results were analysed using simple statistics and the relationships between linear variables were assessed using Pearson's Correlation Coefficient.

### Results

Twenty-four patients with full-thickness laparotomy wound dehiscence or surgical laparostomy were identified and audited. The mean age of patients in the study was 56.7 years, with females representing 62.5% (n=15) of the study sample. Pre-operative risk factors included sepsis (58%, n=14) and hypoalbuminaemia (71%, n=17). Common indications for surgery were visceral perforation (29%, n=7) and bowel obstruction (17%, n=4), with 66% (n=16) of procedures being emergencies. Overall, mortality was 25%

(n=6) with mortality from wound dehiscence (36%, n=5) being higher than that for surgical laparostomy (10%, n=1). Mean hospital stay was 55 days in those 18 patients who survived. Mean time until death was 50 days in those who did not reach discharge. Mean time to TVNT involvement from the moment of wound dehiscence or laparostomy formation was 10.5 days in those who survived to discharge, and 10.4 days in those who died. This suggests that early TVNT involvement neither improves nor worsens survival. The time from wound dehiscence or laparostomy formation to TVNT involvement was, however, positively correlated with length of hospital stay (Pearson's  $r=0.54$ ,  $p=0.0215$ ):

### Discussion

The open abdomen is a rare problem in the UK and can result from abdominal trauma, intra-abdominal sepsis or visceral perforation, all of which can cause abdominal compartment syndrome. Laparotomy wounds in such instances are often left open at the time of surgery as a laparostomy, and may dehisce if not. The open abdomen carries a high mortality and patients who survive require long-term hospitalisation. This increases the risk to the patient's physical and mental health through complications such as hospital-acquired infection and low mood. There is also a significant financial cost associated with these patients. Those at risk of dehiscence should be optimised prior to surgery with prompt recognition and treatment of sepsis and adequate nutritional support. Furthermore, we recommend that open abdominal wounds be managed as part of a multidisciplinary team with the tissue viability nurse specialist at its core. We have shown that early involvement of the TVNT reduces hospital stay significantly. This could be the consequence of prompt recognition and treatment of wound complications, such as infection and fistula formation. Early TVNT involvement does not seem to reduce mortality, however, and this may be due in part to the fact that patients in our study may have died of causes not directly related to their abdominal wound, e.g. ventilator-associated pneumonia or renal failure.

### Conclusion

Early tissue viability nurse team involvement reduces hospital stay in patients surviving the open abdomen.

## Results of a RCT comparing antibacterial honey with a standard treatment in the management of wounds

Val Robson, Clinical Nurse Specialist Leg Ulcer Care, University Hospital Aintree, Liverpool; Susanna Dodd, Lecturer in Medical Statistics, Cancer Research UK, Liverpool Cancer Trials Unit, Liverpool; Dr Steve Thomas, Freelance Medical Writer, Medetec, Cardiff

### Introduction

There is a wealth of dressing products available to the nursing and medical profession to help deal with any type of wound and assist at any stage of wound healing. The practitioner must be constantly updated on new products that are available, almost on a weekly basis. This is time-consuming and costly. It has been suggested that, following the use of honey which can be used at all stages of wound healing, infection is rapidly cleared, inflammation, swelling, pain and odour are reduced, sloughing of necrotic tissue is induced, granulation and epithelialisation are hastened, and healing occurs rapidly with minimal scarring (Molan, 1998; Molan, 2005; White and Molan, 2005). Robust evidence on its efficacy compared to standard treatment is lacking.

### Aims

To compare healing rates with honey and conventional wound dressings. Healing should be complete or a significant improvement made over a period of 24 weeks. The primary aim was to look in a pragmatic setting if the application of honey in wound management is beneficial compared to conventional wound dressings.

### Methods

A standardised medical grade honey (Medihoney™) was compared with conventional treatments on the healing rates of wounds healing by secondary intention in a single centre, open-label randomised controlled trial in which patients were randomised to receive either a conventional wound dressing or honey. All patients with a wound healing by secondary intention were eligible for inclusion in the study, unless they also met certain exclusion criteria which included: diabetes, a history of neuroses, psychoses or dementia, a known allergy to bee/honey products, venous ulcers of less than 12 weeks duration, grade 1 or grade 4 pressure ulcers (European Pressure Ulcer Advisory Panel grading system), wounds containing exposed tendon, muscle or bone, or wounds where a malignancy was present or suspected. Patients with an existing wound infection requiring systemic antibiotics were also excluded, as were those who had received antibiotic therapy in the preceding two weeks.

### Results

The median time to healing in the honey group was 100 days compared to 140 days in the control group. The healing rate at 12 weeks was equal to 46.2% in the honey group compared to 34.0% in the conventional group, and the difference in the healing rates (95% confidence interval, CI) at 12 weeks between the two groups was equal to 12.2% (-13.6%, 37.9%). The unadjusted hazard ratio (95% CI) from the Cox regression

was equal to 1.30 (0.77, 2.19),  $p=0.321$ . When the treatment effect was adjusted for confounding factors (gender; wound type, age and wound area at start of treatment), the hazard ratio increased to 1.51 but was again not significant. Wound area at start of treatment and gender are both highly significant predictors of time to healing.

### Discussion

Few wound care products have been subjected to formal assessment by means of randomised control trials and most clinical studies involve the use of a carefully selected patient population and are limited to the dressing under trial and a product selected as the control. These studies do not always reflect normal clinical practice, not least because the eligibility criteria eliminate some of the most difficult to heal wounds, or the patients are treated as hospital in-patients despite most wounds being managed in the community.

In the current study, an alternative approach was adopted. By not imposing a potential inappropriate product on patients in the control group, honey was effectively being tested against 'best practice' as it was understood at the time. Although the study was originally intended to include 200 patients, due to recruitment problems it was actually terminated prematurely when only 105 patients had been enrolled. As commonly happens, the number of patients with suitable wounds who were able or willing to enter the study was less than expected.

### Conclusion

While the data strongly suggests that healing times following treatment with honey are reduced compared with conventional treatment, and the results are of clinical significance (median of 100 compared to 140 days respectively), insufficient patients were included for this to reach statistical significance. Although not specifically addressed in this study, it is possible that the reduction in healing times also had implications for treatment costs (consumables and nursing time) and improved the quality of life of the patients concerned. These results provide support for the proposition that there are clinical benefits associated with the use of honey in the management of wounds in clinical practice but further research is warranted.

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## Pressure ulcers: results of a district-wide audit

*Kathryn Vowden, Nurse Consultant and Peter Vowden, Professor of Wound Healing Research and Consultant Vascular Surgeon, both at Bradford Teaching Hospitals NHS Foundation Trust, Bradford Royal Infirmary*

### Introduction

A detailed wound care audit was conducted across primary and secondary care trusts within a single district covering a population of 500,000. This abstract will report the results obtained for patients with pressure ulceration detailing care locality, pressure ulcer grade and prevalence, care provision in terms of pressure-relieving equipment, repositioning schedule and wound assessment and treatment.

### Method

A structured audit form was designed and approved prior to circulation to all healthcare organisations within a newly established primary care trust which includes two acute care organisations. Data was reviewed and validated prior to entry into an Access database. Data was then transferred to an Excel spreadsheet for analysis. Where a pressure ulcer was given as the most serious wound, pivot tables were constructed to allow data review.

### Results

Of the 1735 forms returned, 363 (21%) (M:136, F:224, NK:3) listed a pressure ulcer as the most serious wound (Grade I:48, Grade II:195, Grade III:80, Grade IV:40 [EPUAP grading]). The overall mean age of the patients was 79.1 years (M: 75.8, F:81.3). For Grade II ulcers the M:F ratio was 1:2, with a mean age of 80.3 years. For Grade III ulcers the ratio was 3:5 (M:F), with a mean age of 77.1 years and for Grade IV the ratio was 1:1 (M:F), with a mean age of 76.1 years. Ethnicity data showed that the great majority of pressure ulcers occurred in Europeans (326, 89.8%), which was higher than expected given the local ethnicity data, which shows an Asian population of approaching 19%.

Prior medical history data showed that 119 (33.8%) patients had a prior neurological deficit, 96 (26.4%) had a history of vascular disease and that 63 (17.4%) were diabetic, which was lower than the overall population of 1735 patients (19.3%). Of the 363 ulcers, 156 (43%) were on the lower leg or foot and 164 (45.2%) on the sacrum or buttock. The most common site for the remaining 43 ulcers was the hip (18). The foot was the most common single site for grade III and grade IV ulcers. Despite this, Doppler assessments of limb perfusion were rarely undertaken. Ulcer duration varied widely but 71 ulcers had been present for six months or longer. The majority of patients had a single wound (232, 64%), but 17 had four or more wounds and the mean number of wounds per patient was 1.54.

241 pressure ulcers (66.4%) were reported as developing in either the patient's own home or in a residential or nursing

home, while 65 (17.9%) were reported as developing in acute care. Recurrent ulcer was more common in grade II ulcers (24.7%) as compared to 10.8% for grade IV ulcers. Reported prevalence of pressure ulcer infection increased with ulcer grade, 6.7% of grade II ulcers were considered to be infected as compared to 37.5% of grade IV ulcers.

The majority of pressure ulcers (201) were dressed 2–3 times weekly (55.4%), 34 patients required daily dressing changes. The four most common primary dressing categories used were foam (87, 24%), hydrocolloid (66, 18.2%), hydrogel (62, 17.1%), antimicrobial (52, 14.3%). Foam dressings were the most common secondary dressing accounting for 90 out of 147 (61.2%) patients where a two-layer dressing system was used.

A risk assessment was stated to have been performed on 290 (79.9%) patients. For 73 patients, no risk assessment data was provided and this included 23 patients with grade III or IV pressure ulcers. Sixty-five of the 73 patients (89%) with a pressure ulcer who had no reported risk assessment were in the community. Risk assessment was carried out in 115 of the 130 patients (88.5%) with a pressure ulcer in the independent sector. Thirty-eight of the 129 pressure ulcers (29.5%) nursed in their own home or the equivalent had no reported risk assessment.

Pressure-relieving equipment was reportedly declined by six patients. Overall, 195 patients (53.7%) were nursed on a powered device. Eighty of the 120 (66.7%) grade III or IV pressure ulcers had a powered device. For grade III and IV pressure ulcers on the trunk of hip, forty-four of 51 (86.3%) were nursed on a powered device.

### Discussion

Data collected has supported the role of tissue viability nurses in the prevention and management of pressure ulcers in complex, high risk patients. The audit has demonstrated some deficits in care, such as the use of Doppler, which will now be emphasised in the education strategy and policy.

### Conclusion

Audit is a useful tool to evaluate and support practice. An extensive audit such as this is a major undertaking, and its value as a tool to support practice should not be underestimated.



## Dressing wounds: what happens in the real world?

*Kathryn Vowden, Nurse Consultant and Peter Vowden, Professor of Wound Healing Research and Consultant Vascular Surgeon, both at Bradford Teaching Hospitals NHS Foundation Trust, Bradford Royal Infirmary*

### Introduction

A detailed wound care audit was conducted across primary and secondary care trusts within a single district covering a population of 500,000. This abstract will report dressing usage in relation to wound type and care area, and will give an indication of nursing time in relation to wound care conducted in the patient's own home.

### Method

A structured audit form was designed and approved prior to circulation to all healthcare organisations within a newly established primary care trust which includes two acute care organisations. Data was reviewed and validated prior to entry into an Access database. Data was then transferred to an Excel spreadsheet for analysis. The audit collected information relating to primary and secondary dressings, dressing times and nurse travel time, as well as wound aetiology, patient comorbidity and care locality. Dressings were categorised by type and were related to both of the local wound care formularies.

### Results

The mean dressing time for the 490 patients treated in their own home was 20 minutes (range 5 to 65 minutes) with an additional nurse's travel time of 11.5 minutes (range 5 to 45 minutes), giving an average combined time of 31.5 minutes per patient. Acute wounds took less time to dress (mean time 18 minutes) than either leg ulcers (28 minutes) or pressure ulcers (27 minutes). Similarly, smaller wounds took less time to dress than larger wounds.

Overall, the most common dressing type used as a primary dressing was antimicrobial (449), which was used twice as frequently as the next most common dressing type, foam (224). The majority of patients (876) had one product applied, however a large proportion had two or more dressings applied. The most common secondary dressing was foam which in most cases was used with an antimicrobial product.

For acute wounds antimicrobials (197) were the most common primary product category used, followed by dry dressings (177). Inadine® (Johnson & Johnson) accounted for 58.9% of antimicrobial dressings used in acute wounds. Of the 197 acute wounds on which antimicrobials were used, only 56 (28.4%) were classified as infected.

There were a greater range of products used for treating pressure ulcers with a broader use of products that were not listed on the local formularies. The most common products

used were foams and hydrocolloids. Foams were also the most common secondary dressing used (61.2% of cases where a secondary dressing was used).

Antimicrobial dressings were used in 190 leg ulcer patients (39.4%) and were the most common dressing type in all categories of leg ulcer. Overall, iodine-based antimicrobials were used in 97 patients (51%) and silver-based products in 71 (37.4%) cases receiving antimicrobials. The majority of iodine use related to patients with arterial, neuropathic or neuro-ischaemic ulceration. For patients with venous ulceration, the most commonly used antimicrobial products were silver-based (44 of 81 patients, 54.3%), with only 26 receiving iodine-based products (32%).

The most frequently used dressing combination for high exudate wounds was an antimicrobial with either a foam or dry dressing. Antimicrobial dressings were the most common type of dressing used in both wounds considered not infected (306 out of 1369 cases, 22.4%) and those considered infected (121 out of 238 cases, 50.8%).

Concordance was considered to affect care, and therefore treatment choice to some degree in 321 patients (18.5% and involved 107 patients with acute wounds (13% of the total with an acute wound), 119 patients with a leg ulcer (25% of those with a leg ulcer) and 76 patients with a pressure ulcer (21% of those with a pressure ulcer). The most common single cited cause was dementia or Alzheimer's, which is reflected in the age distribution of patients in whom concordance was considered a problem. Concordance issues were reported in 55 patients with a venous leg ulcer (28%), of whom 21 were receiving no compression and only nine high compression bandaging.

### Discussion

Audit has provided valuable information documenting real-world wound care practice. Data would indicate an over reliance on antimicrobial, and in particular silver-based products, and confusion over the recognition and treatment of actual or potential infection. This information will provide valuable cost analysis data and has indicated areas where education is needed.

### Conclusion

Overall there has been a good adherence to products listed on the wound care formulary, but this by itself does not guarantee good wound care practice.





## Ethnicity: influence on wound prevalence as revealed by a district-wide audit

Kathryn Vowden, Nurse Consultant and Peter Vowden, Professor of Wound Healing Research and Consultant Vascular Surgeon, both at Bradford Teaching Hospitals NHS Foundation Trust, Bradford Royal Infirmary

### Introduction

Previous publications from this unit (Chetter et al, 2001) and others (Franks et al, 1997) have shown that ethnicity can affect the prevalence of venous leg ulceration. To allow further comparisons to be made across all wound types, ethnicity data was collected as part of a detailed wound care audit conducted across primary and secondary care trusts within a single district covering a population of 500,000. Population statistics obtained from the National Office of Statistics show that some 19% of the local population is of Asian origin. The Asian population tends to be younger but is known to have a higher prevalence of diabetes mellitus.

### Method

A structured audit form was designed and approved prior to circulation to all healthcare organisations within a newly established primary care trust, which includes two acute care organisations. Returned forms were then reviewed and validated prior to entry into an Access database. Data was then transferred to an Excel spreadsheet for analysis. Pivot tables were constructed based on both ethnicity and wound type to allow data review.

### Results

Of 1735 forms returned, 93 (5.4%) failed to provide ethnicity data. For the 1642 patients with ethnicity data, ethnicity was specified as Asian on 150 forms (9.1%). The mean age for the overall audit population was 68.4 years with the Asian mean age being 42.2 years, while that for the European sub-group was 71.3 years. The overall prevalence of Asian patients with wounds was higher in the acute hospital population (12%) than the community (7.5%). The distribution of wound types was markedly different between the Asian population (74% acute wounds, 12% leg ulcers, 11% pressure ulcers, 3% other wounds) and the overall population (47% acute wounds, 28% leg ulcers and 21% pressure ulcers), and this may go some way to explain the difference between acute sector and community population distributions. For the Asian group acute wounds were more commonly seen in the acute trusts.

The type of leg ulceration was affected by ethnicity, the Asian sub-population having a higher incidence of neuropathic and neuro-ischaemic ulceration and a lower incidence of venous ulceration. In the acute wound group Asian men predominated and in the traumatic wound sub-group there were also a higher number than expected of open surgical wounds on the sacrum in the younger Asian population cohort (possibly reflecting pilonidal sinus surgery

wounds). The prevalence of diabetes in patients with wounds was similar between the Asian (21%) and Caucasian (18.8%) populations, with the highest levels being recorded in the smaller Afro-Caribbean group (44%).

### Discussion

Ethnicity appears to have a significant impact on wound type prevalence. This may in part be related to the age distribution profiles of local sub-populations. There does, however, seem to be a trend within the local Asian population for there to be a higher level of acute wounds and a lower level of chronic wounds. These findings may be useful when planning resource allocation across a district with varied ethnicity profiles.

### Conclusion

Audit is a useful tool to evaluate and support practice and can provide useful data related to population influences on disease expression and therefore resource requirements.

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## Electronic leg ulcers

*Robin Cooper, Leg Ulcer Specialist; Christine Summerhayes, Specialist Registrar; Charles Ranaboldo, Vascular Consultant, all at Salisbury NHS Foundation Trust, Salisbury District Hospital, Salisbury and Janet McGee, Senior Partner, Fordingbridge Health Centre, Fordingbridge*

### Introduction

Leg ulcers are common, affecting 0.2% of the population. The full current costs of care are unclear. This study examines the total health economy costs for the care of lower limb ulceration in one general practice and the impact of introducing a telemedicine system for managing this entity.

### Method

Following discussions, a local GP practice with an already established leg ulcer clinic and the Vascular Department at Salisbury Foundation Hospital, agreed to this study. The nurses at the general practice and hospital clinic were trained in the use of the telemedicine software (LUTM SAASoft Ltd), to include e-referrals and advice. All patients with a non-healing wound on their lower leg (malleolus to knee) were retrospectively identified for the duration of at least a month, between 12/12/2006 to 12/12/2007. All materials, time, travel and services utilised were recorded for this period and then again following the introduction of the telemedicine system.

### Results

From 12/12/2006 to 12/12/2007, in a community population of 12687, 33 patients were identified (0.24%). These patients had had ulceration for a total of 689 weeks with an average of 21.5 weeks per person. They had 2557 dressings and 40 medications prescribed in total. The patients had to visit the GP on 74 of these occasions, travelling an average distance of 4.6 miles. Twelve patients were referred to the vascular department.

For the first two months since the introduction of telemedicine there are currently 17 patients with ulcers, five have had referrals to the vascular unit, four of whom required duplex scanning and five had follow-up appointments cancelled as a result of the new system.

### Discussion

The data is limited and six months data is shortly to be documented. Anecdotal evidence indicates that the service is cost neutral. There has been an increase in costs due to increased numbers of referrals to secondary care for the assessment of the underlying cause, but there was a reduction in follow-ups. However, the length of the patients' healing journey has been reduced and the nurses in the clinic have empty appointment slots for the first time in years. The nurses at the general practice report that patient involvement has increased. This, they feel, is due to the use of photographs and healing graphs. These enable

all parties involved to monitor and measure the outcome to treatment. The telemedicine has allowed the sharing of all the records involved in the patients' care and specialist advice can be given without the patient travelling from their home town. Referrals to secondary care were to diagnose and treat (if appropriate) the underlying cause. It may be appropriate to bring these diagnostics, such as a duplex scan to primary care in the future.

### Conclusion

We have shown that the introduction of a telemedicine system for the community management of lower limb ulceration reduces patient and local costs, but does increase secondary care involvement.

## The use of TNP in war conflict

Jean-Pierre St Mart, CTI Plastics and Burns, Burns Unit, Selly Oak Hospital, Birmingham

### Introduction

British forces have been engaged in conflicts in Iraq and Afghanistan for several years. The injuries sustained are frequently associated with extensive soft tissue stripping and contamination, high levels of exudate and are particularly prone to infection by both bacteria and fungi. Wound management in such scenarios is therefore challenging. Treating such patients involves a comprehensive approach including negative pressure wound therapy (NPWT) and encompasses wound bed preparation, exudate management and infection control. This allows eventual wound closure and improvement of the patient's overall condition. A new NPWT device Wound ASSIST TNP™ by Huntleigh® incorporates the Chariker-Jeter system. This incorporates a single layer of saline-moistened antimicrobial gauze impregnated with polyhexamethylene biguanide which is laid directly on the wound bed. A silicone drain is then sandwiched between the gauze and a further layer of similar gauze material is placed on top to fill in the wound deficit. This is covered with a clear, semi-permeable film which is cut so that the remaining border is at least 2–3cm around the wound. We describe a case in which this same gauze was used on traumatic amputations of limbs and flap and graft reconstruction. We were able to achieve sufficient wound closure and successful skin grafting. The patient recovered well despite the severity of their injuries. Our conclusion discusses the benefits of the gauze-based Wound ASSIST TNP system over more traditionally used foam-based filler systems.

### Patient description

A soldier was injured after stepping on an improvised explosive device. He sustained a traumatic above-knee amputation to the left leg, an above-elbow amputation to the right arm and compound tibia fibula fractures of his right leg. He sustained compound radial and ulna fractures of his left forearm with soft tissue damage.

### Clinical challenges

Wound infection is a major problem. Housing in areas of conflict are composed of animal dung. The initial blast injury causes traumatic amputation and blows contaminated material in between the soft tissue planes. Later, the suction effect locks these dung particles into the remaining tissue stump increasing the risk of infection.

### Clinical management

Surgical treatment involved radical debridement of all traumatic wounds leaving healthy tissue beds to minimise the risk of infection. An external fixator was placed on

the patient's right leg. He underwent open reduction and internal fixation of his left ulna and radial fractures followed by a free Latissimus dorsi flap for soft tissue coverage. NPWT was used on both left leg and right arm stumps and left arm flap for wound bed preparation, exudate management and infection control. Once wounds had been optimised, split skin grafts were applied and covered with NPWT for a further five days. This acted as a dressing for protection against infection and shearing forces. The direct compression effect reduced the risk of haematoma or seroma formation and reduced the risk of graft failure. All split skin grafts took well and the patient was discharged into a rehabilitation centre two months later.

### Discussion

NPWT is used to treat complex traumatic wounds as it provides advantages towards wound bed preparation and infection control. Previous NPWT systems have used foam filler. However, unlike with gauze, it is difficult to alter foam size and shape to fit wounds, potentially only treating part of the wound bed.

### Conclusion

We found the gauze-based Wound ASSIST TNP to be more versatile and capable of treating a larger variety of traumatic wounds. Gauze has advantages regarding conformability and ease of application to irregular wounds. The benefits for patients include comfort and reduced pain during dressing changes with gauze compared to foam.

(For further information on the use of TNP in war conflict see pp. 56–64 in this issue of *Wounds UK*.)





## Introducing Datix reporting to monitor pressure ulcers

Jacqueline Griffin, Tissue Viability Clinical Nurse Specialist, Park Street Clinic, Newtown, Powys

### Introduction

The development of pressure damage or pressure ulcers, either in the community, or in hospital, is a significant factor in delay to recovery or to discharge for patients. The reporting of pressure damage plays a vital part in the control of this clinical risk. Powys Local Health Board (LHB) covers rural Mid-Wales. The tissue viability service is equivalent to two whole-time staff covering all patient groups in community hospitals, nursing and residential homes, as well as those being cared for in the community. Before 2006, any pressure damage recorded was reported through a paper system. This inevitably built in delays for the tissue viability clinical nurses to respond appropriately. By introducing the Datix Risk Reporting System, instantaneous information is delivered to the in-box of the TVCNS, facilitating quicker response times and thereby helping to reduce the impact to the patient of the consequences of pressure damage.

### Development of practice

In 2006 an audit was undertaken of 100 separate cases of reported pressure damage using the paper reporting system. This demonstrated poor quality information and highlighted the inability to identify where pressure damage was occurring and that pressure damage was being erroneously assigned to Powys because the entire patient journey was not tracked.

As a result of the audit a decision to evaluate the usefulness of Datix as a tool for reporting and monitoring pressure damage was made. Thirty-six pressure damage reports originally submitted via paper form in 2005 were transferred to Datix, as a test of the system.

In August 2006 the electronic submission of pressure damage reports was rolled out with the community nursing teams. At the same time a further 100 pressure damage reports which had been submitted on paper were transcribed to Datix. By January 2007, consultation and training began to roll out the reporting process to the hospitals with a 'go live' date of 1 July, 2007.

### Outcomes observed

Since the introduction of Datix reporting there have been 1,439 reported incidents of pressure damage. Where pressure damage is occurring can be identified.

All patients admitted to Powys community hospitals can expect to be assessed within the first two hours of admission. Within the community a patient is assessed as part of the initial first assessment to the caseload. Information relating to the patient and their pressure damage is held within the computer system and can be tracked to follow improvements or deterioration.

The use of specific equipment and care strategies are also detailed.

Reports come from forty-three different entry points into the LHB, including local acute district hospitals, local nursing and residential homes, as well as all community nursing teams, community hospitals and the mental health teams.

The data shows an initial increase in reported pressure damage incidents. However, this is because of increasing numbers of areas reporting. Reviewing the three years of data shows that numbers of pressure damage are now remaining stable with a slight reduction overall.

### Discussion

There are a plethora of risk assessment tools to be used alongside clinical judgement in identifying patients at risk of pressure damage. Powys LHB use the Pressure Sore Prevention Score (PSPS) tool.

In the early nineties as part of the purchaser/provider split within the NHS, pressure damage was introduced as a quality indicator. As a response to this, Powys LHB introduced a paper-based system of reporting pressure damage. Ten years later the system was in need of updating. The reporting of clinical incidents and near misses via Datix was already fully implemented within the organisation. By utilising this system it was felt that staff would embrace the change quicker.

The production of a crib sheet reminds staff of all information required to give better quality data. The inclusion of the PSPS score and MUST tool score give recognisable auditable measures.

Emailed reports of notification of pressure damage allow for more effective use of the tissue viability nurse's time. The system allows for online review and feedback to be emailed, or, where appropriate, the clinical area can be contacted directly to offer further advice or arrange a visit.

### Conclusion

This work is a collaboration of the Clinical Governance Team and the Tissue Viability Team. Any patient with pressure damage has a documented journey of care, following them from their home into hospital and, where appropriate, back home, or to residential or nursing home. The system has improved the quality of pressure damage data and the ability to monitor pressure damage across the whole LHB.

Monthly reports of this important clinical risk are sent to the Nation Patient Safety Agency.



**The use of liposuction in the management of chronic oedema**

Alex Munnoch, Consultant Plastic Surgeon, Ninewells, Dundee

**Introduction**

My name is Sharon Saayman and I am a patient of Mr Munnoch of Ninewells Hospital, Dundee. I have suffered from primary lymphoedema of the right leg for ten years. This has affected me both physically and mentally. I was led to believe that there was no hope of any treatment for this condition, other than compression hosiery. However, I was informed via a TV documentary that a new procedure, liposuction, was now available.

Mr Munnoch is the only surgeon in the UK who performs this procedure, achieving brilliant results for his patients. After begging the NHS to consider me for treatment, Mr Munnoch performed my operation removing 3.2 litres of fat from my affected leg. The results were immediate. Although this is not a cure, I am thrilled as it has given me my life back.

**Development of practice**

The procedure involves removal of fat from the affected limb, after which compression is required and the patient has to be very compliant. Studies are showing that patients with lymphoedema of the lower limb are weight-bearing on their good limb, walking with the foot of the affected limb turned out. Long-term damage incurs if this continues.

**Outcomes observed**

Without Mr Munnoch's innovative treatment and professional dedication, I would not have been given the opportunity to resume my old life.

**Conclusion**

Mr Munnoch's professional skill and dedication should be recognised. Without people like him, new procedures that give patients hope and quality of life, would not be pursued.

**The Wounds UK awards programme continues to recognise annually the outstanding achievements of practitioners who are improving standards in wound prevention and management, via research, clinical audit and practice development in the UK.**

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Wounds UK would like to thank all those who submitted entries to this year's awards and the following companies for their continued support:

