



A Victorian
Government
initiative



RESIDENTIAL AGED CARE CORONIAL COMMUNIQUE

VOLUME 3. ISSUE 3.

June 2008

ISSN 1834-318X

CONTENTS

Editorial	1
Wound Management Practice in Age Care	1
Heel ulcers as a cause of death, says who?	2
Pressure ulcers, immobility and dementia	3
Care and communication	3
Wound Management Practice in Age Care	3
Pressure Ulcers	4
What can be done about pressure sores?	4
Resources and references	4

FREE SUBSCRIPTION

The Clinical Liaison Service will publish the **RESIDENTIAL AGED CARE CORONIAL COMMUNIQUE** on a quarterly basis. Subscription is free of charge and will be sent electronically to your preferred email address. If you would like to subscribe to **RESIDENTIAL AGED CARE CORONIAL COMMUNIQUE**, please email us at: racc@vifm.org

Next Edition: Sept 2008

EDITORIAL

Welcome to the sixth issue of the Residential Aged Care Coronal Communique focusing on pressure ulcers. Three cases are presented in this issue along with two short reports about the research evidence base and current practice in the prevention, recognition and management of pressure ulcers.

Thanks to all subscribers who participated in the online survey evaluating the Residential Aged Care Coronal Communique. Results of the survey will be reported later this year.

WOUND MANAGEMENT PRACTICE IN AGED CARE

Associate Professor Geoff Sussman

Faculty of Medical and Health Science, University of Auckland & Faculty of Medicine Monash University

Pressure ulcers, leg ulcers and skin tears are common problems in an ageing population. Residents in Aged Care Facilities are at higher risk of developing these wounds due to their frailty and multiple medical conditions. To fully understand the nature and causes of these wounds requires consideration of the effects of ageing on tissue and healing. The ageing process impacts on most of the structures of skin. Skin loses hair follicles, sebaceous glands that supply natural moisture to the skin, and a reduction in nerve receptors, blood supply and sweat glands. The result of these changes is the skin becomes thinner, brittle, avascular and more prone to injury.

An important principle for the care of an older person's skin is to avoid any adhesive products as their removal will risk the development of a skin tear. In addition it is crucial to ensure good skin tone. Remember that soaps dry out skin and only use pH neutral (5.5) soap alternatives e.g., QV wash. The use of moisturisers as ointments or creams to maintain skin condition will also improve the protective barrier in the skin.

With pressure ulcers, removing the pressure is the most essential part of the management. However, it is more important to identify residents who are at risk of developing a pressure wound and using a pressure reducing surface on beds and chairs to prevent development of the ulcer.

With leg ulcers it is important to diagnose the underlying cause of the ulcer venous, arterial, mixed, vasculitic, and diabetic as the management depends on treating the wound environment and the cause at the same time.

Continued Page 3

PUBLICATION TEAM

Editor in Chief: Joseph E Ibrahim
Consultant Editor: Rhonda Nay
Managing Editor: Lisa Brodie
& Fiona Kitching
Designer: Caroline Rosenberg

Address: Clinical Liaison Service (CLS)
Coronial Services Centre
57-83 Kavanagh St
Southbank
Telephone: +61 3 9684 4364

ACKNOWLEDGEMENTS

This initiative has been made possible by the collaboration of a diverse range of organisations: The Department of Justice, the Victorian Institute of Forensic Medicine, the State Coroner's Office, Clinical Liaison Service and Department of Human Services – Aged Care Branch.

REPRODUCTION & COPYRIGHT

This document may be reproduced in its entirety for the purposes of research, teaching and education and may not be sold or used for profit in any way. You may create a web link to its electronic version. Permission must be obtained for any modification or intended alternative uses of this document.

If referring to this publication, the following citation should be used:
Residential Aged Care Coronial Communiqué [electronic resource]: Clinical Liaison Service – Connecting Clinicians with Coroners. Southbank, Vic. State Coroners Office; Victorian Institute of Forensic Medicine. Available at: <http://www.vifm.org/communique.html>

All publications produced by the Specialist Investigations Unit, including the Coronial Communiqué and WorkWISE can be found on our website at <http://www.vifm.org/n962.html>

FEEDBACK

The CLS team is keen to receive feedback about this communication especially in relation to changes in clinical practice.

Please email your comments, questions and suggestions to: racc@vifm.org

HEEL ULCERS AS A CAUSE OF DEATH, SAYS WHO?

CASE NUMBER 461/04

Precis Authors: JE Ibrahim
Consultant Physician, (CLS)

CLINICAL SUMMARY

Mr E was an 88 year old male with a medical history of dementia, renal failure, atrial fibrillation, heart failure, stroke, and metastatic carcinoma of the prostate complicated by double incontinence. Mr E had been living independently in his own home until mid-2003, when he moved to live with family. From August 2003 he was attending a wound clinic for the management of bilateral heel ulcers. In October 2003, Mr E was admitted to a Private Hospital because of constipation and decreasing mobility where the presence of bilateral heel ulcers requiring daily dressings was noted. Mr E was eventually discharged from the Hospital to a high care bed at RACF. Mr E was at the RACF for only a few days before being transferred back to the hospital with sepsis related to the pressure ulcers and died very soon after.

PATHOLOGY

No autopsy was performed. The cause of death on completion of the investigation was 1(a) Sepsis, 1(b) cellulitis left leg/pressure sores on heels, (2) renal failure, atrial fibrillation, heart failure, stroke, dementia, prostatic carcinoma with metastases in liver/bones.

INVESTIGATION

The investigation into the death commenced after the State Coroner's Office received a referral from the Aged Care Complaints Resolution Scheme and a request from the family. The medical records at the hospital and RACF as well as statements from the medical practitioner and facility staff were required. The records from the RACF indicated staff were aware of the need to attend to Mr E's heel ulcers, but did not

describe the type of wound or dressing required. The nursing notes also indicated the wounds were necrotic with heavy ooze and offensive smell.

The investigation revealed that Mr E had become confused, unable to follow directions and was pulling at his catheter. The RACF staff was concerned at this time that Mr E may have been developing a catheter-related urinary tract infection. It was Mr E's daughter who, concerned about her father's extreme distress from pain, discovered that his left leg was red and tense from the toes to below the knee and insisted that a doctor be called. A locum doctor diagnosed left leg cellulitis and arranged a transfer to a Private Hospital.

A statement from the consultant physician at the Private Hospital who provided the care explained that Mr E's two acute problems included cellulitis and exacerbation of heart failure. The physician considered it appropriate to sign the death certificate as 'the cause of death was known and not unexpected in the circumstances'. Further he expressed the opinion that the development of heel ulcers in patients with dementia in nursing homes is very common, and did not warrant a referral to the Coroner on medical grounds.

CORONER'S COMMENTS

While Mr E's heel ulcers pre-dated his admission to the RACF by at least three months, the marked deterioration during the three day stay at the RACF is concerning. The deterioration may have resulted from inadequate care, underlying frailty and compromised capacity to respond to infection or both. In all the circumstances, with optimum care and earlier intervention, the risk of infection could only be decreased but not entirely eliminated.

As to the adequacy of care provided by the RACF, the Coroner referred the family's complaint back to the Aged Care Complaints Resolution Scheme, which is better placed to assess standards of care.

PRESSURE ULCERS, IMMOBILITY AND DEMENTIA

CASE NUMBER 3126/03

Precis Authors: JE Ibrahim
Consultant Physician, (CLS)

SUMMARY

Mrs. B was an 85 year old female resident at a High Level Care Facility with a medical history of dementia, osteoarthritis and a past history of having ingested caustic soda in 1999. At the time of entry Mrs B was immobile, unable to communicate and requiring full assistance with personal care needs. Two years later, Mrs B developed a chest infection that responded to treatment with antibiotics. However, following this illness, Mrs. B became more rigid and staff noted the development of a minor pressure area. This eventually became a sacral ulcer and despite treatment with antibiotics and zinc the ulcer continued to deteriorate and increase in size.

Mrs B died some months later in the Facility and the general practitioner completed a death certificate. The Registry of Births, Deaths and Marriages rejected the death certificate because it included a reference to the ingested caustic soda. The Coroner investigated the matter and determined that Mrs B's death was the result of natural causes. The ingestion of caustic soda did not appear to be directly related to the cause of death and was not required to be included on the death certificate. Also that the care provided by the Residential Aged Care Facility was appropriate.

CARE AND COMMUNICATION

CASE NUMBER 4190/07

Precis Authors: Carmel Young
RN, (CLS)

CLINICAL SUMMARY

Ms T was a 74 year old female with a significant past medical history including diabetes mellitus, stroke and ischaemic heart disease. In December 2005 with deteriorating health she moved to live in a RACF.

Two months later Ms T was admitted to an acute hospital with necrotic heel ulcers. Comprehensive assessment & consultation by the Diabetic Foot Unit, Vascular and Plastic Units determined the right foot was not salvageable. The options for treatment included either a below knee amputation or conservative management. After discussions with her family the conservative management path was chosen and Ms T died soon after.

PATHOLOGY

An autopsy was not conducted because the case was not reported to the Coroner until two years after the death. The cause of death was 1(a) Respiratory failure, acute pulmonary oedema, 1(b) Ischaemic heart disease, 1(c) Non-insulin dependent diabetes mellitus, 2 Atrial fibrillation, stroke with residual hemiplegia, dementia, pressure sores (Grade 4).

INVESTIGATION

An investigation into the circumstances of the death commenced when Ms T's daughter reported the death to the Coroner in September 2007 following on from a complaint to the Aged Care Resolution Scheme. The family requested an investigation into the RACF's prevention and management of pressure ulcers. They expressed their shock at how bad the wounds were when the dressings were removed at the hospital.

The investigation reviewed the management of pressure areas and indicated that Ms T sat in a water comfort chair during the day and was given a high protein diet due to loss of weight. Ms T required high level care including assistance with meals and was doubly incontinent.

When Ms T's right heel was noticed to be red, it was covered with a dressing to protect the heel. Two weeks later when there was a dry blister on the heel it was treated with Intrasite gel, Comfeel and Mefix. Another week later heel protectors were in place. One month after the initial redness developed in the heel signs of necrosis appeared and Curagel foam and Mefix was applied, a wound swab cultured Methicillin-Resistant Staphylococcus Aureus. The coroner sought an expert opinion on the link between the pressure ulcers to death. The expert commented "Although the development of pressure ulcers does not indicate 'ideal' management, it is certainly recognised as a real risk and it appears that efforts to both prevent and treat them by the aged care facility were reasonable".

CORONER'S RECOMMENDATIONS

Nil

AUTHOR'S COMMENTS

Pressure ulcers are preventable. However, when they do develop, prompt and thorough attention to manage the resident and the wound is imperative. Communication between the RACF and families is crucial to ensure they are informed about changes in the health of the resident and kept updated about the management plan.

WOUND MANAGEMENT PRACTICE IN AGE CARE continued from Page 1

Skin tears are an acute injury resulting from simple trauma to the limbs and are due to a loss of connection between the layers in skin (i.e., epidermis and the dermis). If treated quickly and by the use of modern methods these injuries will heal quickly. The other common wounds are leg ulcers and pressure ulcers.

There are many different wound dressings available. Choosing a wound care dressing or product depends on the type of wound, which may require assessing the wound colour, depth and type of exudate. Research recently conducted in Victoria demonstrated that wounds managed appropriately healed faster and cost less to manage in the RACF.

WHAT CAN BE DONE ABOUT PRESSURE ULCERS?

There is good evidence from international studies that use of a range of strategies can prevent pressure ulcers by about one third. Detailed information about best practice approaches and Australian guidelines for prevention of functional decline currently being implemented in Victoria is available at <http://www.health.vic.gov.au/acute-agedcare>. Below is a summary list from that document (p105) of best practice approaches for pressure ulcer care.

- Perform a pressure ulcer risk assessment on patients/residents on admission.
- Perform a daily skin integrity assessment on residents at risk of pressure ulcers.
- Optimise skin hygiene.
- Keep skin clean and free from all potentially irritating substances or those that affect skin pH.
- Use topical moisturiser.
- Avoid high skin temperature by avoiding skin contact with plastic surfaces.
- Prevent or minimise effects of incontinence.
- Maintain adequate nutrition, hydration.
- Maintain mobility and review mechanical loading and support surface measures.
- Ensure residents do not remain in one position for longer than two hours.
- Avoid prolonged sitting in a chair or wheelchair.
- Consider use of high specification foam mattresses.
- Reduce heel pressure by using pillows or foam under the whole length of the lower leg.
- Do not use air filled vinyl boots to reduce heel pressure.
- Consider using high technology and other devices in very high risk people or those who have failed with other conservative measures.

PRESSURE ULCERS

A/Professor Caroline Brand

Director, Clinical Epidemiology & Health Services Evaluation Unit, Melbourne Health & Centre for Research Excellence in Patient Safety (CREPS), Monash University.

Pressure ulcers, often referred to by different names such as bedsores, pressure sores, and decubitus ulcers, are areas of skin breakdown. They occur when soft tissues (including skin, underlying fat and muscle) are compressed between a bony area and another external object such as a bed or chair or trolley. This is why they tend to be found around bony areas of the body; most commonly the bottom of the spines (sacrum), the hips and heels.

There are many factors relating to the person and the environment that can increase risk of pressure ulcers, some of the most common being reduced mobility, impaired cognition and sensory loss. In those at risk, prolonged hospitalisation and exposure to friction increase the risk further.

Pressure ulcers have an important adverse impact on a person's quality of life. They are associated with pain and discomfort, prolonged hospitalisation and risk of secondary infection. They can result in accelerated functional decline in older people ultimately leading to increased likelihood of requiring residential care accommodation and reduced survival.

In Victoria, between 2003 and 2006, three large surveys assessed the prevalence (ulcer present on admission) and incidence (new ulcer developed during admission) of pressure ulcers in hospitalised people. These surveys have accompanied a focussed effort to implement evidence-based guidelines to improve care across the State.

The most recent survey found that the prevalence of pressure ulcers has reduced by 33% in acute and subacute care hospital patients. Of note is the study also indicates that 24.5% of patients already had the pressure ulcer at the time of admission to hospital.

RESOURCES AND REFERENCES

- Victorian Government Health Information website includes information on ongoing Pressure Ulcer Point Prevalence Surveys (PUPPS) and Pressure Ulcer Basics (PUBS) education packages. <http://www.health.vic.gov.au/pressureulcers>.
- Surgical Materials Testing Laboratory for information on products <http://www.smtl.co.uk>
- Coleman EA, Martau JM, Lin MK, Kramer AM. Pressure ulcer prevalence in long-term nursing home residents since the implementation of OBRA '87. Omnibus Budget Reconciliation Act J Am Geriatr Soc. 50(4) 2002:728-32.
- Hodginson, B. and Nay, R. (2005) 'Effectiveness of topical skin care provided in aged care facilities', International Journal of Evidence-Based Healthcare, Volume 3, No 4, pp.65-101. ISSN 1744-1595
- Vu T, Harris A, Duncan G, Sussman G., Cost-effectiveness of multidisciplinary wound care in nursing homes: a pseudo-randomized pragmatic cluster trial. Family Practice June 2007;24(4):372-379

All cases that are discussed in the Residential Aged Care Coronial Communiqué are public documents. A document becomes public once the coronial investigation process has been completed and the case is closed. We have made every attempt to ensure that individual clinicians and hospitals are de-identified. However, if you would like to examine the case in greater detail, we have also provided the coronial case number.