Minimising Pressure Injury Incidence In Vascular Surgery Patients

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Declaration of
Financial Interests or Relationships

I have no financial interest or relationship(s) to disclose
Background

- Pressure Injuries often result in:
  - Decreased quality of life
  - Increased length of stay
  - Readmission to hospital
  - Limb loss
Background

- Established pressure injury risk assessment tools have a poor inter-rater reliability.

- Recent research in Western Australia has found:
  - That nursing PI risk assessment does not adequately assess PI risk in the High Risk Foot.
  - That nursing understanding of the factors leading to pressure injuries is not uniform.
Aims/Outcomes

- Identify which patients admitted to hospital by Vascular Surgeons are at increased risk of pressure injury.

- Decrease pressure injury incidence in patients admitted under the vascular surgical team.
Method

- Retrospective audit of patients who developed pressure injuries over 12 month period
  - Demographics
  - Co-morbidities
  - Surgical time
  - Length of stay
- Develop changes to patient management
- Re-audit at 12 month intervals post intervention
Retrospective Audit Results: Demographics

Gender
- Female
- Male

Admission Type
- Elective
- Emergency

Age Distribution
- 40 to 49
- 50 to 59
- 60 to 69
- 70 to 79
- 80 to 89
- 90 to 99

n=16
Retrospective Audit Results

- Poor documentation of intervention or patient non-compliance
- Patient weight, length of stay and surgical time did not appear to be relevant in this small sample
Retrospective Audit Results: Pressure Injury Risk Assessment – How did we do?

- Pressure Injury Risk on Admission:
  - Not at Risk: 4
  - At Risk: 2
  - Moderate Risk: 12
  - High Risk: 0
  - Very High Risk: 0

- Interventions Documented Prior to Pressure Injury:
  - Bed device: 3
  - Heel elevator: 2
  - Prophylactic dressing: 9
  - Repositioning: 7
  - OT referral: 5
  - Skin care: 4
  - Dietician referral: 1

n=16

Delivering a Healthy WA
Retrospective Audit Results

Co-morbidities

- 9 patients had PAD, CRF and Diabetes
- 4 patients had 2 out of 3

n=16
Retrospective Audit Results

Location of Pressure Injury

- Sacrum: 10
- Foot: 7
- Other: 1

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Retrospective Audit Results

Stage of Pressure Injury

- Stage 2: 8
- Stage 3: 1
- Stage 4: 1
- Unstageable: 1
- Suspected Deep Tissue: 1
Retrospective Audit Results

Stage of Pressure Injury - Sacrum

- Stage 1: 2 cases
- Stage 2: 6 cases
- Stage 3: 2 cases
- Unstageable: 0 cases
- Suspected Deep Tissue: 0 cases

n=10
Retrospective Audit Results

Stage of Pressure Injury - Foot

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable
- Suspected Deep Tissue

n=7
YOU CAN'T GET DIABETIC FOOT ULCERS
IF YOU HAVE BILATERAL BELOW KNEE AMPUTATIONS
Retrospective Audit Results

Co-morbidities

- 9 patients had PAD, CRF and Diabetes
- 4 patients had 2 out of 3

n=16
Interventions

- Patients with PVD, CKD and/or Diabetes were managed as high risk of pressure injuries. This included utilising:
  - Prophylactic dressings to heels and sacrum
  - Offloading devices such as cushions
  - Offloading mattress
- Education to improve documentation of interventions as well as patient non-compliance
Results

Incidence of Pressure Injuries for Vascular Patients Following Introduction of Revised Risk Assessment Practices
(per 1000 Occupied Bed Days)

<table>
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<tr>
<th>Year</th>
<th>Unstageable/1000 OBD</th>
<th>Stage 4 / 1000 OBD</th>
<th>Stage 3 / 1000 OBD</th>
<th>Stage 2 / 1000 OBD</th>
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Baseline

Post Intervention
Results – Foot Injuries

Incidence of Foot/Heel Pressure Injuries for Vascular Patients

- Baseline
- Post Intervention

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Summary

- Incidence of pressure injuries decreased over intervention period

- There were ZERO foot pressure injuries in the last audit period.
Further interventions

- Integration of the Waterlow Score across the hospital site as this grades diabetes, chronic diseases and peripheral vascular disease as increasing majority of vascular surgery patient risks.

- Further research is required to improve methods for assessing pressure injury risk.
Acknowledgements

Nursing and Allied Health Staff, Ward G62, Sir Charles Gairdner Hospital, Perth WA

Professor Shirley Jansen  MBChB, FRACS, FRCS, PhD
Prof Vascular Surgery, Medical School, Curtin University, WA
Head of Dept Vascular and Endovascular Surgery, Sir Charles Gairdner Hospital, Perth, WA
Director Heart and Vascular Research Institute, Harry Perkins Institute of Medical Research, WA, Australia
Adj Clin Prof, Faculty of Health and Medical Sciences, University of Western Australia, WA

Miss Kathryn Jafferies  BNurs, GradCertHlthEd
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References


SERIOUSLY GUYS

CUT IT OFF WITH THE LEG JOKES

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