Introduction

It has been widely accepted that pressure and shearing forces are the cause of pressure ulcers. The risk of developing pressure ulcers increases when people are immobilized.

Patients undergoing surgery are immobile and unable to change position. They cannot feel the discomfort prolonged pressure causes under the influence of the sedation and anaesthesia.

Anaesthesia alters blood pressure, tissue perfusion, the patient’s response to pressure and pain, and oxygen and carbon dioxide exchange. The decrease in blood pressure may contribute to pressure ulceration when diastolic pressure is less than 60mm Hg.

Aims of review

The principle aim of this review was to identify pressure ulcer risk factors. A further aim was to articulate effective strategies for the implementation of pressure ulcer risk management.

Materials and methods

Literatures from 1990 to 2005 were searched through the databases of Medline, CINAHL and Cochrane Library. The Keywords used for searching included pressure ulcers, pressure sores, risk factors, surgery, perioperative care, preoperative care, intraoperative care, postoperative care, operating theatre.

Conclusions

The significance of pre-operative risk factors (i.e. current pressure ulcer, poor nutrition level, Braden Scale score <20, diabetes, vascular disease, older than 50) and intra-operative risk factors (i.e. surgery >4 hours, poor anaesthesia assessment status, lower arterial blood pressure, position during surgery) were highlighted.

This literature review highlighted the range and variability of information that operating room nurses required to minimise the risk of pressure ulcer development.

The importance of continuous quality improvement to enhance a culture of pressure ulcer assessment and management in operating room was also identified.

Thus, facilitating nurses ongoing vigilance and interventions in the operating room and other post-operative units for the ultimate advantage of patients.

Continuous quality improvement for pressure ulcer management in Repatriation General Hospital

Senior management support

Facilitate nurses attitude to changes

Continuous quality improvement for pressure ulcer management in Repatriation General Hospital

Pre-operative risk factors

Intra-operative risk factors

*Note: Lindgren 2005 identified epidural anaesthesia has higher risk than general anaesthesia for pressure ulcer management during surgery

References


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For further information

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