



## Service Priorities and Programmes

### Electronic Presentations

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#### **The Application of Custom-made Head Wound Protector to Enhance Wound Management/Healing at Scalp for Neurosurgical Patients**

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#### **Keywords:**

occupational therapy

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head wound protector

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#### **Introduction**

Wound ulcers are a common cause of morbidity in acute care hospitals. During 2015 to 2Q 2016, there were 4 cases of unhealed wound at scalp after cranial surgery at neurosurgical ward in PYNEH. Wound management of these patients was a challenge as a result of the shearing and friction generated by their head movements despite using the conventional pressure relieving head cushions. Occupational therapists fabricate assistive device to enhance ulcer prevention and management. Application of an innovative head wound protector was fabricated to tackle this issue.

#### **Objectives**

To enhance wound management and healing by protecting patient's skin integrity at scalp.

#### **Methodology**

A custom made head wound protector with adjustable straps was fabricated. Lycra was chosen for its light and smooth texture, significant strength, elasticity, and permeability. These factors provide comfort, fitting conformity for patients, and ease the disinfection process of caretakers.

A dome shaped cushion insert instead of donut shape was made to avoid increase pressure along the rim of the cut out areas.

A pocket was fabricated on the head wound protector at the location of the ulcer for the cushion insert. Such application offered protection/cushioning of the scalp skin during patients' bed rest / sit out with prevention of shear and friction forces generated during head movements that aggravate the ulcer.

Briefing sessions on proper application technique of the head wound protector were given to responsible staff.

The patients continued with wound dressing routines by nurses.

**Result**

Wound conditions healed/improved post 2-4 weeks of head wound protector application

Proper application of the head wound protector can enhance wound management and healing on neurosurgical patients with wound at scalp.

Application of the head wound protector has been extended to at risk patients in ward.