Improving Standards of Cannulation Care Trust-wide: ‘Our Journey’

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Introduction

- High Quality Care for All (1) advocated the NHS focus on improving patient safety & the quality of clinical care
- PVC (Peripheral Venous Cannula) is a commonly performed invasive procedure with an associated risk of infection. Poor technique & inadequate management of the PVC are causative factors in development of bacteraemia (2)
- One study demonstrated an infection rate of 0.2 per 1000 intravenous cannula days (3)
- Care of peripheral cannula, underpinning by infection prevention & control policies, is essential & an integral aspect of a patient’s care
- MKHFT is a 560 bedded DGH and is committed to preventing healthcare associated infections (HAIs)
- DoH target for MRSA bacteraemia for MKHFT for 2008-09 was 7
- We accepted an invitation to participate in a project supported by the South Central SHA to improve standards of care in relation to cannulation & post insertion management

Objectives of Project Team

- All inclusive approach, including all specialties, adults & paediatrics
- Alignment of practice to best available evidence
- Standardisation & assessment using a structured training programme
- Standardisation post insertion management & documentation of clinical practice
- Standardisation of equipment employed in cannulation & post insertion management
- Reduce HCAIs associated with peripheral venous catheters

Issues

- No formal standardisation cannulation training & assessment programme for the last 18-24 months
- No formal training offered to junior medical staff
- No formalised record of those who had attended the training across the Trust
- No provision for regular updates for those practicing cannulation
- Cannulas were not always inserted using full aseptic technique & post insertion care was poorly documented
- Visual Infusion Phlebitis (VIP) scores were not routinely recorded
- A need for standardisation of equipment

Key Initiatives Implemented

Cannulation Training

- In January 2009, the Practice Development Team launched a new Trust cannulation training programme, based on the Vascular Access Network structured learning programme (4)
- To support this new Peripheral Intravenous Catheter Insertion Training & Assessment Framework has been written, and a database developed to maintain records of training & competency
- Refresher training introduced in November 2008 to maintain competency

Documentation

- New evidence based cannula care plans for adults & paediatrics were developed and after a three-month Trust-wide trial were approved & implemented in May 2009

Aseptic Non Touch Technique

ChloraPrep®

Policy and Patient Information

- To support these initiatives the cannulation policy was rewritten based on best practice (5,6) covering insertion, post-insertion management & removal of PVC
- Patient information leaflet was designed

Audit

- To monitor compliance an audit tool based on Saving Lives Care Bundle for PVC (V) was developed & introduced in January 2009

Obstacles Overcome

- Resistance was initially met to the new care plan, new safety cannulas & dressings
- Poor compliance with audit completion, first tool seen as a paper exercise & not user friendly
- Junior Doctor resistance to training – Why now?
- Role of Health Care Assistants in cannulation
- Delay in consultation feedback & approval process of key documents – policy, patient information & PIDG for saline flushes

Cannulation Audit Tool

- The audit tool has been revised & is being trialed in four clinical areas
- It facilitates electronic capture & results are immediately available to clinical staff. This enables staff to generate improvement ideas & allows for changes in clinical practice to be made rapidly (7)
- It facilitates month on month improvements in practice & hence results

Discussion

- The Trust has consistently produced low monthly rates of bacteraemia

- Despite the introduction of a number of initiatives to improve standards of care in cannulation we are unable to correlate these to a reduction in MRSA bacteraemias
- Throughout the course of the project other initiatives have been implemented Trust wide including Clean Your Hands Campaign, weekly hand hygiene audits, Infection Risk Assessment & a new dress code ‘Bare Below the Elbow’
- Recent audit results have demonstrated that cannulation standards of care are improving throughout the organisation with 100% of patients having a VIP score of 1 or below and 85% had a care plan
- Duration of cannula in the patient has also improved with 91% of cannula being in for less than 72 hours, and where the cannula had been in for longer periods the rationale was documented

References: