1. Introduction

From April 2009, the Dept. of Health has mandated that all elective patients admitted to hospitals should be screened for meticillin-resistant Staphylococcal aureus (MRSA) carriage and attempts made to eradicate carriage in those found to be positive. As part of this drive all chronic haemodialysis (HD) patients must now be screened regularly for MRSA carriage.

Since 2003 all chronic HD outpatients in the Leicester Renal Network dialysing through a HD catheter have been screened monthly for carriage of both MSSA/MRSA(with eradication therapy where this is detected) to try to reduce catheter-related bloodstream infection(CR- BSI)(see separate guideline). This guideline extends this screening to all patients dialysing through other vascular access devices (i.e. arteriovenous fistula or grafts) who will be screened 3 monthly for MRSA carriage only.

The rationale for this is:-

- HD patients have frequent hospitals admissions and prior knowledge of MRSA status will allow appropriate precautions if they are admitted to hospital
- HD patients may require temporary vascular access at any time and therefore identifying and eradicating MRSA carriage may reduce the risk of CR-BSI

Reducing the carriage in the whole HD population may protect patients in close proximity to patients with HD catheters in situ

2.Scope

This guideline is for medical and nursing staff responsible for the care of vascular access in haemodialysis patients.

Clinical guidelines are 'guidelines' only. The interpretation and application of clinical guidelines will remain the responsibility of the individual practitioner. If in doubt consult a senior colleague or expert.

3.Recommendations, Standards and Procedural Statements

3.1 Identification of MRSA nasal and skin carriage

3.1.1 All prevalent HD patients with arteriovenous fistula or grafts must have nasal and perineal swabs taken every 3 months. The swabs must be sent to microbiology with request for MRSA screen and marked as elective patient.

(NB: the exceptions to this are patients who are using buttonhole needling method who should be screened monthly for both MRSA/MSSA carriage as per guideline ' Prevention of haemodialysis CR-BSI infection').

3.1.2 This applies also to patients who have previously been known to be MRSA positive once they have three sets of negative swabs.

3.1.3 Swabs should also be taken from any open wounds, sputum sent if patient has a productive cough and a urine sample sent if the patient has a urinary catheter.

3.1.4 All new patients commencing HD treatment should be screened at time of referral and

when they start dialysis at new dialysis centre.

3.2 Patients found to be carriers of MRSA

Patients found to be positive will need to be managed sensitively as this may cause concern for many patients. All MRSA positive patients require the following – eradication therapy, information on MRSA, risk assessment for isolation for haemodialysis and follow-up.

3.3 Information for patients

The named nurse or deputy must provide the patient with a copy of the UHL leaflet 'Understanding Infections' and be prepared to answer any questions. The infection prevention team are available to provide advice and support regarding any patient queries.

3.4 Risk assessment of need for isolation for haemodialysis for MRSA carriers

Patients identified with MRSA carriage must be risk assessed using the standard proforma (see appendix for categorisation of risk in MRSA positive haemodialysis patients). However, in general they will not require isolation if attending for outpatient haemodialysis unless they have an open wound, weeping skin lesions or productive cough.

3.5 Follow up of MRSA positive patients

Patients will be re-screened 48-72hrs after finishing treatment and retreated if they remain positive. Patients will require x3 negative screens before they are considered negative. However, treatment should not be given more than three times if persistent carrier. Some patients have been found to remain long term carriers of MRSA despite treatment.

4 Education and Training

The responsibility for ensuring staff are trained and updated with these procedures lies with IP link nurses and haemodialysis matrons.

5. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Compliance with 3 monthly screening for MRSA carriage	% screened and number/% MRSA positive	HD matrons/IP link nurses	Annual	

5. Supporting References

UHL MRSA policy

6. Key Words

haemodialysis, MRSA, screening, mupirocin

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