



MRSA Action UK

Registered Charity No. 1115672

MRSA Action UK Comments On Surgical Site Infection draft guideline 16 June 2008

MRSA Action UK welcomes the guidance on Surgical Site Infection (SSI). We believe this guidance should be incorporated into the Hygiene Code and "Saving Lives" programme and welcome the opportunity to be involved in its ongoing development as new evidence and knowledge is gained in understanding how SSIs are acquired and how they can be prevented. Route cause analysis should always be undertaken when any SSI occurs, and lessons learned. We would like to see evidence used from route cause analyses used in research to help identify continuing improvements in the preventative measures that can be shared across the healthcare setting to alleviate the massive burden of SSIs, both financially and in terms of patient outcomes.

We responded on the elements that we as patient representatives feel have the most significant impact on making the treatment of surgical wounds with the aim of preventing surgical site infection. Our comments follow each of the Guideline Development Group's draft recommendations and evidence statements set out as follows:

NICE Guideline Development Group (GDG) Guidance on Clean technique compared with aseptic non-touch techniques for dressing changes

"Evidence statement

There was insufficient evidence from a pilot study to show whether there is a significant difference in the rate of wound healing for a clean compared with an aseptic non-touch dressing change technique for healing by secondary intention. EL 1-

GDG interpretation

The GDG agreed that 'aseptic' non-touch techniques for removing or changing surgical wound dressings can minimise the risk of contaminating the site with additional microorganisms.

GDG Recommendation:

'Aseptic' non-touch techniques should be used for removing or changing surgical wound dressings"

MRSA Action UK response

MRSA Action UK welcomes this recommendation and would like to add that:

'Aseptic' non-touch technique only works if :

- 1. All staff are trained well in it.**
- 2. Staff monitor the procedure in their own areas - tell your colleagues if they are not following the principles of aseptic non-touch technique (ANTT)**

Non Touch Techniques...are paramount. Not all pathogenic organisms are removed by "effective" hand washing. Non touch of key components directly or indirectly is the single most important part of achieving asepsis. This forms part of a systematic approach needed in infection prevention and can significantly reduce the incidence of SSIs and bacteraemia – particularly in the handling of indwelling devices.

GDG comment on Risk Factors

“Many risk factors for the development of SSIs have been identified, often without robust evidence. However, several of these pre-, intra- and post-operative factors have been the subject of randomised clinical trials, of varied quality, and these have been addressed”

Whilst this statement relates to conditions that give a predisposition to patients who are at higher risk of acquiring an SSI, MRSA Action UK believe training of staff in pristine aseptic non-touch technique is needed. We are unclear as to the level of training given and how regularly this is observed and audited. Healthcare workers who do not carry out procedures with the level of ability and skill needed present a significant risk to patients. Some reference to continuing training and assessment to mitigate risks should be given in these guidelines – these should link with training and development included in “Saving Lives”.

Information for Patients - GDG Recommendation

“Patients and carers should receive clear and consistent messages about the risks and management of SSI and what measures are being undertaken to reduce them, throughout their patient journey.

Patients and carers should receive information on post-discharge wound care.

Patients and carers should be given information to help them recognise an SSI and who to contact if they are concerned.”

MRSA Action UK fully support this recommendation and would add that Integrated Care Pathways for healthcare infections should be used to help to communicate this information to both patients and all those involved in their care post discharge. We recommend the approach adopted by the Lincolnshire Care Pathway Project.

Non-sterile theatre wear GDG evident statement

“Evidence statement

There is limited evidence to show that there is no difference in the rate of SSI when face masks are worn during clean or dirty surgery. (EL 1+)

There is no evidence available that examines whether the wearing of scrub suits or head attire or overshoes by scrubbed or circulating theatre staff can prevent surgical site infection.”

MRSA Action UK do not agree with this evidence statement. There are studies to show some considerable success at reducing SSI when face masks are worn. As 30% of the population – including healthcare workers carry S.aureas, including in the nose, we believe the wearing of face masks is an essential element of preventing SSI. Scrub suits, head attire and overshoes are key elements in the chain to preventing SSIs.

Evidence:

**Recommended preventive interventions healthcare associated infection
Central line associated bloodstream infections (CLABSI)**

Maximal sterile barrier precautions

Preventive intervention

Use aseptic technique including the use of a cap, mask, sterile gown, sterile gloves, and a large sterile sheet for the insertion of all central venous catheters (CVC)

**Eggimann 2000 – Study Switzerland Tertiary care or university hospital,
conducted 3/1997 - 4/1997 – Length of follow up 8 months**

Hand hygiene Maximal sterile barrier precautions Chlorhexidine skin disinfection

Prompt removal of unnecessary catheters

QI Strategies: Clinician education

A multiple-approach intervention strategy targeted at the reduction of vascular access infections was implemented in March 1997. An educational campaign consisting of 30-min slide-shows and practical demonstrations was developed for all medical ICU staff (21 fellows or residents, 82 nurses, and 15 nursing assistants), and was completed by individual in-service training.

The guidelines covered the following: preparation of the material to avoid any interruption during insertion; skin preparation (hair-cutting instead of shaving) and disinfection (alcohol-based solution of chlorhexidine gluconate 0.5%, with 2 min drying time); maximum barrier precautions (**sterile gloves and gown, cap, mask, and a large sheet**) used for all but peripheral lines; subclavian or wrist vein as standard insertion sites; and dressings (dry gauze covered by a non-occlusive adhesive band).

Administration sets, devices, and dressings were replaced every 72 h, except for lines receiving lipid or blood products, and for the first dressing after catheter insertion 24 h. Hand disinfection was strongly emphasized before and after the insertion, replacement, or manipulation of any vascular device. Central lines were not routinely replaced, but were changed over a guidewire in cases of clinical sepsis without documented source of infection. Prompt removal of any device not intended for use was strongly recommended.

Infection rate prior to intervention: 3.1 microbiologically documented CLABSI per 1,000 catheter-days
Infection rate after intervention: 1.2 CLABSI per 1,000 catheter-days
 $p < 0.04$

Source: Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies

In **“Prevention of postsurgical infections: some like it hot. Nosocomial and hospital-related infections”** Romney concluded that **current scientific knowledge is insufficient to recommend abandoning the use of facemasks.**

Source:

Current Opinion in Infectious Diseases. 15(4):427-432, August 2002. Kluytmans, Jan a; Voss, Andreas b in order to prevent SSI.