Infection Prevention and Control (IPC)

Standard Operating Procedure for

GROUP A STREPTOCOCCUS (GAS)
AND
INVASIVE GROUP A STREPTOCOCCUS (iGAS)
in a healthcare setting

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Title of document: Standard Operating Procedure (SOP) for Group A Streptococcus (GAS) and invasive Group A Streptococcus (iGAS) in a healthcare setting

Document reference: Issue 1, October 2015

Scope: Organisation Wide

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Author: Sharon Leitch, Infection Control Nurse

Policy application / Target Audience Throughout NHS Ayrshire and Arran

Policy Statement: It is the responsibility of all staff to ensure that they consistently maintain a high standard of infection control practice.

Last reviewed: October 2015

Agreed by: Infection Prevention and Control Policy Review Group

Electronic approval by: Dr Alison Graham Medical Director

Date: 02 November 2015

REFERENCES


1.0 GENERAL INFORMATION

<table>
<thead>
<tr>
<th>Organism</th>
<th><em>Streptococcus pyogenes</em> commonly known as Group A Streptococci (GAS) does not frequently present in healthcare.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Asymptomatic carriage of GAS can be found in the throat and on the skin. However, it can cause a large variety of infections such as pharyngitis (sore throat), impetigo, scarlet fever, cellulitis or wound infection. Occasionally these bacteria become more invasive in nature, resulting in invasive Group A Streptococcus (iGAS) causing severe life threatening infections for example, necrotising fasciitis, streptococcal toxic shock syndrome (STSS) and blood stream infections. Outbreaks of infections have been known to occur in surgical, obstetric and burns patients.</td>
</tr>
</tbody>
</table>

| Incubation period | 1 – 3 days for GAS pharyngitis  
4 – 10 days for impetigo (see SOP for Impetigo) |
|-------------------|------------------------------------------------|

| Period of communicability | - Pharyngitis (sore throat), scarlet fever, cellulitis and non-complicated wounds, treated with appropriate antibiotics, first 24 hours  
- Necrotising fasciitis or where there is evidence of significant discharge or high risk of shedding, for example mothers and neonates on maternity units and burns units, periods of communicability have been known to be longer |
|---------------------------|------------------------------------------------|

<table>
<thead>
<tr>
<th>Individuals most at risk</th>
<th>General population</th>
</tr>
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</table>

<table>
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<tr>
<th>Notifiable disease</th>
<th>Invasive Group A <em>Streptococcus</em> (iGAS) is a notifiable organism.</th>
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<tbody>
<tr>
<td></td>
<td>Initial notification of iGAS is normally made via the Consultant Microbiologist by telephone to the Health Protection Team (HPT) at Afton House, Ailsa Campus on 01292 885858 or, <em>out of hours</em>, to the Consultant in Public Health Medicine (CPHM) via University Hospital Crosshouse switchboard on 01563 521133.</td>
</tr>
<tr>
<td></td>
<td>Non-invasive Group A Streptococcal infection (GAS) is not notifiable.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Informing the IPCT</th>
<th>Following implementation of all relevant infection prevention and control precautions you <strong>must inform the Infection Prevention and Control Team (IPCT)</strong> by phoning (01563) 825765 or by emailing the IPCT mailbox <strong><a href="mailto:InfectionControl@aapct.scot.nhs.uk">InfectionControl@aapct.scot.nhs.uk</a></strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em><strong>NOTE</strong></em>: All the details above are included in the Standard Operating Procedure (SOP) for Group A Streptococcus (GAS) and invasive Group A Streptococcus (iGAS) in a healthcare setting Issue No 1, October 2015 Page 3 of 7***</td>
</tr>
</tbody>
</table>
2.0 INFECTION CONTROL PRECAUTIONS FOR GAS and iGAS

2.1 Standard Infection Control Precautions (SICPs)

Standard Infection Control Precautions (SICPs), Section 1 of the Health Protection Scotland (HPS) National Infection Prevention and Control Manual, must be used by all staff, in all care settings, at all times, for all patients whether infection is known to be present or not to ensure the safety of those being cared for, as well as staff and visitors in the care environment.

SICPs are the fundamental IPC measures necessary to reduce the risk of transmission of infectious agents from both recognised and unrecognised sources of infection.

Potential sources of infection include blood and other body fluids secretions or excretions (excluding sweat), non-intact skin or mucous membranes and any equipment or items in the care environment that could have become contaminated.

2.2 Transmission Based Precautions (TBPs)

TBPs are implemented in addition to SICPs to provide further protection when GAS or iGAS is known or suspected. TBPs are categorised by the route of transmission of the infectious agents (some infectious agents can be transmitted by more than one route). GAS is cross transmitted via contact and iGAS can be cross transmitted via contact and droplet. Therefore the following TBPs are required:

- **Contact precautions**
  Used to prevent and control infections that spread via direct contact with the patient or indirectly from the patient’s immediate care environment (including care equipment). This is the most common route of cross-infection transmission.

- **Droplet precautions**
  Used to prevent and control infections spread over short distances (at least 3 feet (1 metre)) via droplets (>5μm) from the respiratory tract of one individual directly onto a mucosal surface or conjunctivae of another individual. Droplets penetrate the respiratory system to above the alveolar level.
**Patient Placement**

- Patients with suspected/confirmed infection should be isolated in a single room with ensuite facilities and:
  - The door should remain closed. If this is not possible, a risk assessment **must** be included in the nursing notes e.g. patient at risk of falls
  - An isolation notice must be placed on the outside of the door
- Isolation should continue until:
  - 24 hours of appropriate antibiotics have been administered in cases with pharyngitis, cellulitis and non-complicated wounds (no exudate)
  - Either the wounds are healed or negative samples have been obtained in cases with necrotising fasciitis and where there is significant discharge or high risk of shedding. Samples should be obtained 48 hours post treatment

**Personal Protective Equipment**

- In patients with pharyngitis, cellulitis and non-complicated wounds (no exudate)
  - Plastic aprons and disposable gloves should be worn when in direct contact with the patient or the patient’s immediate environment

  In patients with necrotising fasciitis (during debridement and dressing changes) and for procedures where droplet spread is possible, for example during tracheostomy care.
  - Face protection surgical facemask and goggles or visor should be worn
  - FFP3 respirator for Aerosol Generating Procedures (AGPs)

**Hand Hygiene**

- Hands must be decontaminated as per your 5 moments for Hand Hygiene:
  1. Before touching a patient
  2. Before clean/aseptic procedure
  3. After body fluid exposure risk
  4. After touching a patient
  5. After touching patient surroundings

**Patient Care Equipment**

- Where available, use single use/single patient use equipment. All single use/single patient use equipment must be discarded as clinical waste
- Equipment should be kept to a minimum
- All shared or reusable equipment must be decontaminated between patients using a chlorine releasing agent e.g. Actichlor Plus™ 1 x 1.7g Actichlor tablet in 1 litre of water (concentration = 1,000 PPM). Please refer to manufacturers instructions for compatibility of product
- Communal facilities such as baths, bidets and showers should be cleaned and/or decontaminated between all patients
| Environmental cleaning by Hotel Services | ▪ Enhanced routine cleaning of the patient’s accommodation with a chlorine releasing agent e.g. Actichlor Plus™ 1 x 1.7g Actichlor tablet in 1 litre of water (concentration = 1,000 PPM), should be undertaken by hotel service staff until instructed otherwise (see [Actichlor Plus™ General Environment Poster](#)). It is the responsibility of nursing staff to ensure that domestic assistants are aware of this requirement  
▪ Following the removal of the patient, the room should have a terminal clean carried out prior to the next patient being admitted |
| Clinical Waste | All waste must be discarded as clinical waste. |
| Linen | ▪ All linen should be discarded as infected i.e. placed in a water soluble bag then into a clear plastic bag and lastly into a red laundry bag  
▪ Labels should be attached to each red linen bag on sealing, clearly stating:  
  - Hospital of origin  
  - Ward or Department  
  - Date and Time of bagging  
  - Signature / initials |
| Safe management of blood and body fluid spillages | Spillages must be decontaminated immediately with a chlorine releasing agent e.g. Actichlor Plus™ using the following dilutions:  
▪ Blood spillages (or bodily fluid with associated blood); 10 x 1.7g Actichlor tablets in 1 litre of water (concentration = 10,000 parts per million (PPM))  
▪ Body fluid spillages (with no associated blood); 1 x 1.7g Actichlor tablet in 1 litre of water (concentration = 1,000 PPM).  
**Remove spillage with disposable paper roll prior to applying a chlorine releasing agent to reduce the risk of chemical reaction** |
| Occupational exposure | ▪ Occupational exposure to GAS can be prevented by adhering to precautions outlined above  
▪ Contact the Occupational Health Department if you have any concerns regarding exposure to GAS or require information regarding your current immunisation status, if applicable  
Where there has been evidence of healthcare acquired infection. The Occupational Health department may require to co-ordinate staff screening programmes. This is in accordance with NHS Ayrshire and Arran, Health and Safety Manual PN29. |
| Respiratory Hygiene and Cough Etiquette | ▪ Patient should be encouraged to cover their nose and mouth with a tissue when coughing, sneezing or blowing their nose |
### 3.0 OTHER RELEVANT INFORMATION

| Transferring Patients | • If possible, do not transfer patient until TBP’s are no longer required  
• Prior to transfer, staff must inform any receiving ward/department that the patient has a suspected/confirmed infection, as well as a history of specimens taken and Infection Prevention and Control precautions taken  
• Prior to transfer, you must ensure the ward receiving the patient has suitable accommodation |
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<tbody>
<tr>
<td>Specimens</td>
<td>Send specimens as clinically indicated (also refer to the <a href="#">Laboratory Handbook</a>)</td>
</tr>
<tr>
<td>Care After Death</td>
<td>A body bag is required for iGAS</td>
</tr>
<tr>
<td>Patient Clothing</td>
<td>Laundry going home, must be placed into a clear bag and then into a patient clothing bag. The <a href="#">Washing Clothes at Home Information Leaflet</a> must be issued.</td>
</tr>
</tbody>
</table>
| Visitors              | • GAS  
  - Pregnant women, children and immunocompromised individuals should not visit until the patient has had 24 hours of appropriate antibiotic treatment  
• iGAS  
  - Pregnant women, children and immunocompromised individuals should not visit until the patient has been clinically assessed as being asymptomatic of infection  

Visitors of patients diagnosed with iGAS should be advised of the importance of hand hygiene. Personal protective equipment (PPE) is not required unless visitors are assisting with personal care. Use of PPE should be under the supervision of the staff looking after the patient. For further information please contact the IPCT or the on-call consultant Microbiologist. |
| Documentation         | Ensure that the patient is fully aware of their infectious status and that the provision of this information has been documented in the notes. |
| Action to be taken     | Patient confidentiality must be maintained at all times. Information concerning any infection must only be given to others on a need to know basis. |
| Additional information | None |

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Issue No 1, October 2015  
Page 7 of 7