Monitoring surgical wounds for infection

Information for patients

This leaflet explains surgical wound infection and the national programme for monitoring infections acquired in hospitals.
What are surgical wound infections?
Most surgical wounds heal up rapidly without complications. A minority of surgical wounds are complicated by infection. This occurs when germs (micro-organisms such as bacteria) enter the incision (cut) that the surgeon makes through your skin to carry out the operation.

Many germs live in and on our bodies and also in our environment. Most are harmless or even useful. Our bodies have natural defences against the germs that can cause harm. Our skin normally prevents germs from entering our bodies, but any break in the skin (whether due to injury or surgical incision) can allow them to enter and cause an infection.

When do these infections develop?
A surgical wound infection can develop at any time from 2 to 3 days after surgery until the wound has healed (usually 2 to 3 weeks after the operation). Very occasionally, an infection can occur several months after an operation.

Surgical wound infections are uncommon (see table). Most surgical wound infections are limited to the skin but can occasionally spread to deeper tissues. Infections are more likely to occur after surgery on parts of the body that harbour lots of germs, such as the gut.

Rates of surgical infection in different types of operations

<table>
<thead>
<tr>
<th>Type of operation</th>
<th>Average number of infected wounds in every 100 operations*</th>
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</thead>
<tbody>
<tr>
<td>Knee joint replacement</td>
<td>less than 1</td>
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<tr>
<td>Hip joint replacement</td>
<td>less than 1</td>
</tr>
<tr>
<td>Abdominal hysterectomy</td>
<td>2</td>
</tr>
<tr>
<td>Vascular surgery</td>
<td>3</td>
</tr>
<tr>
<td>Coronary artery bypass graft</td>
<td>3</td>
</tr>
<tr>
<td>Large bowel (gut) surgery</td>
<td>8</td>
</tr>
</tbody>
</table>

*Infected wounds detected while patients are in hospital or at readmission following the operation.

How will my wound be monitored?
During your stay in hospital, the nurse who changes your wound dressings will check for any signs of infection. If you are concerned about your wound, tell the nurse who is looking after you. Don’t be tempted to remove your dressing, or touch your wound or wound drain. You could accidentally transfer germs from your fingers to your wound.

Infection can develop after you leave hospital. Some redness and swelling are to be expected after surgery, however you may have an infection if you develop one or more of the following symptoms:
• the skin around your wound gets red or sore and you do not think that it is part of the normal wound healing process, or it feels hot and swollen
• your wound has a green or yellow coloured discharge (pus)
• you feel generally unwell or feverish, or you have a temperature
If you have a problem with your wound, contact your GP unless you have been told to contact the hospital. About one month after your operation you may receive a questionnaire (paper, email or text) or telephone call from the hospital to ask if you have problems with your wound. Many patients leave hospital shortly after their operation, and hospital staff need to find out about wound infections that occur after patients leave hospital, not just those that develop while patients are in hospital.

What happens if I develop symptoms?
Your hospital will collect information about your operation and monitor your wound for signs of infection. If the nurse, midwife or doctor suspects that you have a surgical wound infection, they may take a sample from the surface of your wound with a swab and send it to the laboratory for tests. Your nurse or doctor may prescribe treatment with antibiotics. Information collected about your operation is used by the hospital to provide you with the best individual care.

Who will my information be shared with?
The UK Health Security Agency (UKHSA) is responsible for looking at surgical wound infections in hospitals across England. To help with this, your hospital shares personal information about your operation with UKHSA, including your name, date of birth, sex and NHS number. Also shared is information about your risk of developing a surgical wound infection, including:

- your general level of health before your operation
- information about your operation
- information about any infections you may have had following your surgery

UKHSA needs to use personal information to check the quality and accuracy of the information we receive from your hospital and make sure we don’t count patients more than once. We also use this information to link to NHS records, which we obtain from NHS Digital, to see if you are readmitted to hospital after your surgery, and if you have any risk factors for infection such as diabetes. This helps our public health scientists assess hospitals’ rates of surgical infections and helps improve the treatment provided to patients. In addition, we also link to mortality records from the Office for National Statistics to see if any patients with a surgical infection die from this infection.

Your information may also be linked to microbiology laboratory data held by UKHSA to look for further information on clinical infections. We may also link your information to the records held by other clinical registries, which contain more detailed surgical information such as the types of surgical implants used.

Your mobile phone number and email address, or those for someone acting on your behalf may be shared with UKHSA. This is so we can send you a wound healing questionnaire by email or text for you to complete and return to UKHSA.

Where can I find out more about surgical infections?
You can find out more about surgical wound infections on the UKHSA website at Surgical site infection (SSI): guidance, data and analysis.
Where can I find out more about UKHSA?
You can find out more about how UKHSA uses your personal information to look at surgical wound infections at Surgical site infection surveillance privacy notice.

Produced by UKHSA for patients whose surgery is being monitored under UKHSA’s Surgical Site Infection Surveillance Service.

If you have any further questions, please contact:
(Add contact details here)

This leaflet is also available in large print and in the following languages: Arabic, Bengali, Chinese (Simplified or Traditional), Gujarati, Polish, Punjabi and Urdu. You can download this publication from Monitoring surgical wounds for infection: information for patients.

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