Pin/wire classification and treatment

Pin/wire site infections are common with the use of external fixators. Nearly all patients will experience several pin/wire site infections throughout the course of treatment. The severity of infection will determine treatment. The following guidelines outline the grading and appearance of sites and the appropriate action to take. Communication with the clinic is extremely important if you have questions regarding the signs of infection.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Appearance</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pin/wire sites are clear of any redness, drainage or pain.</td>
<td>• Clean pin/wire sites once a week with normal saline.</td>
</tr>
<tr>
<td>1</td>
<td>Slight redness/inflammation at sites.</td>
<td>• Inspect sites daily and clean with normal saline.</td>
</tr>
</tbody>
</table>
| 2     | Area around a site is red and tender with a colorless, watery or clear yellow drainage. | • Clean that site daily with half-strength hydrogen peroxide.  
• Start mupirocan (Bactorban®) ointment daily on that site.  
• If stitches have been removed, soak the limb in a tub with Dreft detergent 1-2 times per day. |
| 3     | Area around the site is painful, red and swollen with a purulent (thick, colored) drainage. | • Start antibiotics and follow the plan for Grade 2 infection.  
• The doctor may consider removing or exchanging the pin/wire.  
• Pain medication may help temporarily.  
• Contact the office if there is no improvement after 2-3 days. |
| 4     | Deep redness/severe discomfort at sites indicating a serious infection (an X-ray shows early signs of bone infection). Fever and purulent drainage may be present. | • Start antibiotics and follow the plan as for Grade 3 infection.  
• The pin/wire must be removed. |
| 5     | All of the above including deep bone infection. | • Start antibiotics and follow the plan as for Grade 3 infection.  
• Surgery/debridement. |