

IPC Advice Bulletin for GP Practices

Issue No. 03 – October 2016

To further support GP staff, here is some information on good infection prevention and control (IPC) practice.

Panton-Valentine Leukocidin

If you have a patient with a history of recurrent boils (furuncles), abscesses or soft tissue infections this could be caused by PVL-SA.

Staphylococcus aureus (SA) is a common type of bacteria that approximately one in three people carry on their skin or in their nose. Some types of *Staphylococcus aureus* produce a toxin called Panton-Valentine Leukocidin (PVL) which can destroy white blood cells. Both Methicillin Resistant *Staphylococcus Aureus* (MRSA) or Methicillin Sensitive *Staphylococcus Aureus* (MSSA) can produce PVL toxin.

What are the symptoms of PVL-SA?

PVL-SA infection mainly occurs in previously healthy young adults, but it can affect other patient groups including children. If PVL-SA enters the body, e.g., through a graze, wound or hair follicle, it can attack the skin causing recurrent and painful boils, abscesses, folliculitis, cellulitis and purulent eyelid infections. Pain and erythema are often out of proportion to the severity and signs of infection. PVL-SA can also cause serious infection such as necrotising pneumonia, however this is rare.

Risk factors for PVL-SA

The risk of acquiring the infection is increased with the five C's:

- *close contact* – playing contact sports such as rugby or skin-to-skin contact with an infected family member or friend
- *contaminated items* – touching or sharing something which is contaminated with the

bacteria, e.g., gym equipment, towels or razors

- *crowding* – living in crowded conditions increases the chance of passing on the infection, e.g., military accommodation, prisons and boarding schools
- *cleanliness* – an unclean environment will encourage the bacteria to spread
- *cuts and grazes* – having a cut or graze will allow the bacteria to enter the body.

When to suspect PVL-SA

PVL-SA should be suspected when boils, abscesses and soft tissue infections are recurrent or when members of the same household or close contacts are affected. If infection is suspected, a swab should be taken from the lesion/damaged skin and PVL testing requested. Any clinical history and risk factors should be included on the microbiology form.

Management of PVL-SA

If the result is positive, you will be notified either by Public Health England or your local Community Infection Prevention and Control team who will provide advice as per national guidance.

Health Protection Agency Guidance on the diagnosis and management of PVL-SA and further information can be found at:

www.infectionpreventioncontrol.co.uk

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