

VARICELLA-ZOSTER VIRUS

KEY POINTS

Chicken pox (primary infection) and shingles (reactivation infection, especially of the trigeminal nerve) are highly infectious and risky to older, pregnant and immunosuppressed, and older individuals

Staff must know their immune status, screening is done with rubella on appointment

SUMMARY OF ACTION PLAN FOR A RISK ASSESSMENT

- Case of chicken pox or trigeminal zoster in a clinical area: perform a risk assessment
- WARD STAFF should draw up lists of Staff and Patient contacts (See Contact Tracing form at www.infectioncontrolservices.co.uk/forms.htm) indicating those who know they are immune or not, and contact the Infection Control Team, who will pass on both lists to Occupational Health and Virology
- OH should follow up contact staff not known to be immune by arranging for an antibody test
- If susceptible, staff may be excluded from working in sensitive areas between day 8 after first contact and day 21 after last contact
- Infection Control Team decide who should be offered VZIG and live vaccine
- Serologically negative staff may be offered vaccination


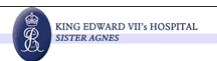



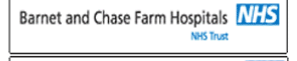



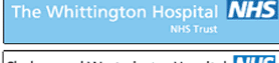


INTRODUCTION

Chicken pox and shingles are caused by the same herpes virus (varicella-zoster)

Primary infection:

CHICKEN POX

Highly infectious from first upper respiratory symptoms before the rash occurs until all the vesicles have dried and crusted (usually about 6 days). Virus is present in respiratory tract secretions which are a potent source of airborne infection as well as in the vesicle fluid.

Issued by Infection Control Services Ltd. For more policies and information visit: www.infectioncontrolservices.co.uk	Publication Date: April 2007 Review Date: April 2009	Page 1 of 3
     	    	
<p>Legal disclaimer. Care has been taken to confirm the accuracy of the information presented and to describe generally accepted practices. However, the author, is not responsible for errors or omissions in these Guidelines and make no warranty, express or implied, with respect to the contents of the publication. We do not accept any liability whatsoever for any loss or damage arising from applying, following or using any interpretation of information contained in this document.</p>		



Reactivation:

HERPES ZOSTER (SHINGLES)

Shingles only occurs in patients who have previously had chickenpox. The virus reactivates in sensory nerve cells and erupts in the cutaneous distribution of the nerve. Systemic dissemination may occur in immunosuppressed patients.

Contacts of shingles who have not had chickenpox are at risk but they will develop symptoms of chickenpox not shingles. Virus is present in the vesicle fluid until the vesicles have dried. However, the respiratory secretions are not usually a source of infection in shingles except in those with oro-facial (trigeminal) disease. Immunosuppressed patients (eg Hodgkin Disease) may have prolonged illness with viable virus excretion.

OCCUPATIONAL HEALTH

Staff who think that they have *not* had chicken pox and those who are unsure will have serum tested for varicella antibodies as part of the pre-employment screen. The serum taken for rubella screening will also be used for this purpose. Staff in the Paediatric, Infectious Diseases, Neonatal and Obstetric units, Genito-Urinary Medicine, Haematology, Radiotherapy and Oncology, Renal Unit, Out-patients and A/E staff, Therapists, Radiographers, junior doctors and all nurses will have their VZV antibody status checked irrespective of their history of chicken pox.

Staff who are not immune should not nurse patients with chicken pox or shingles.

Staff susceptible to varicella-zoster virus should not work in sensitive areas between 8 and 21 days after exposure; this will be decided by the Infection Control Team with Occupational Health for individual cases. Otherwise they should be aware of the prodromal syndrome (fever with or without upper respiratory symptoms.)


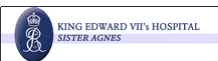







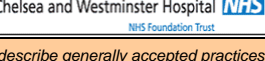
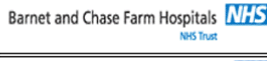

IMMUNISATION

Active (live attenuated) immunisation

Varicella-zoster virus vaccine has been recently licensed in the UK. Decisions as to whether or not to use this have yet to be made by Occupational Health/Virologists.

Passive (immunoglobulin) immunisation

Varicella-virus immunoglobulin (VZIG) may be offered by Occupational Health to non-immune staff who are immunosuppressed (e.g. on steroids, pregnant or with haematological malignancy).

Issued by Infection Control Services Ltd. For more policies and information visit: www.infectioncontrolservices.co.uk	Publication Date: April 2007 Review Date: April 2009	Page 2 of 3
      	  	 
<p>Legal disclaimer. Care has been taken to confirm the accuracy of the information presented and to describe generally accepted practices. However, the author, is not responsible for errors or omissions in these Guidelines and make no warranty, express or implied, with respect to the contents of the publication. We do not accept any liability whatsoever for any loss or damage arising from applying, following or using any interpretation of information contained in this document.</p>		

MANAGEMENT OF PATIENTS

Patients with chicken pox should be transferred to a properly ventilated isolation unit. If not, Source Isolate in a side room with the door shut and window open.

Patients with shingles, especially of the trigeminal distribution should be nursed in Source Isolation. Patients should be nursed by staff *who know that they have had chickenpox (either by history or by antibody testing)* and are therefore immune. In the case of inadvertent exposure, the ward staff will create a list of contacts (See Contact Tracing Form at www.infectioncontrolservices.co.uk/forms.htm) and establish whether any patients or staff need their antibody status checked. The list is sent to Infection Control Nurses who will send copies to Microbiologists/Virologists and Occupational Health staff. Further action is decided by Microbiologists/Virologists


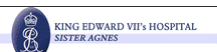








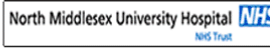
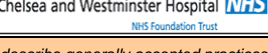
MANAGEMENT OF STAFF CONTACTS

In an outbreak, serological testing for staff who are uncertain of their immune status can be arranged through Occupational Health. About two thirds of those who give no history of having had chickenpox will have serological evidence of past exposure. Occupational Health will inform individual susceptible staff of the need to (a) redeploy them between days 8 and 21 after exposure or (b) administer immune globulin (VZIG).

If a contact becomes ill within the incubation period of the disease (i.e. up to 21 days after last exposure) with even a trivial cold or fever, then they should not work but report to Occupational Health. Non-immune staff in contact with these diseases must not transfer to other wards or nurse immunosuppressed patients during the incubation period.

MANAGEMENT OF SUSCEPTIBLE CONTACTS (PATIENTS AND STAFF)

Varicella-zoster Immune Globulin (VZIG) is available for high risk patients who have been exposed to chickenpox or shingles. It will attenuate, not prevent, infection. It is only effective when given soon after exposure and is usually reserved for those not immune to varicella-zoster in whom the disease may be life threatening. Decisions as to whether to administer VZIG is the responsibility of a Virology/Microbiology Consultant.

Issued by Infection Control Services Ltd. For more policies and information visit: www.infectioncontrolservices.co.uk	Publication Date: April 2007	Page 3 of 3
	Review Date: April 2009	
		
		
		
		
		
<p>Legal disclaimer. Care has been taken to confirm the accuracy of the information presented and to describe generally accepted practices. However, the author, is not responsible for errors or omissions in these Guidelines and make no warranty, express or implied, with respect to the contents of the publication. We do not accept any liability whatsoever for any loss or damage arising from applying, following or using any interpretation of information contained in this document.</p>		