Post exposure prophylaxis for varicella zoster virus in Pregnancy

Pregnant and significant exposure to varicella zoster virus

Any previous
- History of chickenpox/shingles
- 2 doses of varicella vaccine
- 1 dose of shingles vaccine
- Documented varicella IgG positive (≥100mIU/ml)
- Varicella-zoster immunoglobulin (VZIG) or IV human immunoglobulin (IVIG) in past 3 weeks

Consider IMMUNE

Varicella IgG PRESENT (≥100mIU/ml) IMMUNE

Send serum (gold top bottle) to Regional Virus Laboratory (Kelvin building, Royal Victoria Hospital, Belfast) for varicella IgG testing (Turn around time 48 hours)

Varicella IgG NEGATIVE (<100mIU/ml) NON-IMMUNE

1Significant exposure is face to face contact or present in a small room for 15 minutes with:
- Someone with chickenpox from 48 hours before rash until lesions crust over
- Someone with disseminated shingles until lesions crust over
- Someone with exposed shingles (e.g. ophthalmic) until lesions crust over
- Someone who is immunosuppressed with shingles until lesions crust over

Duty Virologist will contact clinician, please ensure name and telephone number are stated on request form

Varicella zoster immunoglobulin when indicated must be administered within 10 days of exposure, if close to cut off contact duty virologist urgently on 07889086946

Reference: Public Health England Guidance for issuing varicella-zoster immunoglobulin (VZIG); October 2016

Authors: Dr Angel Boulos, Dr Matthew Costley
Post exposure prophylaxis for Varicella Zoster Virus in immunosuppressed individuals

Significant exposure to Varicella Zoster Virus ¹, ²

**Group A**

Previous

- History of chickenpox/shingles
- 2 doses of varicella vaccine
- 1 dose of shingles vaccine
- Documented varicella IgG positive (≥150mIU/ml)

YES  

Consider IMMUNE

**Group B**

Send serum (gold top bottle) to Regional Virus Laboratory (Kelvin building, Royal Victoria Hospital, Belfast) for varicella IgG testing (Turn around time 48 hours)

Varicella IgG PRESENT (≥150mIU/ml) IMMUNE

Varicella IgG NEGATIVE (<150mIU/ml) NON-IMMUNE

YES

Duty Virologist will contact clinician, please ensure name and telephone number are stated on request form

Varicella zoster immunoglobulin when indicated must be administered within 7 days of exposure, if close to cut off contact duty virologist urgently on 07889086946

¹Significant exposure is face to face contact or present in a small room for 15 minutes with:

- **Someone with chickenpox** from 48 hours before rash until lesions crust over
- **Someone with disseminated shingles** until lesions crust over
- **Someone with exposed shingles** (e.g. ophthalmic) until lesions crust over
- **Someone who is immunosuppressed with shingles** until lesions crust over

²Do not use this algorithm if:

- on prophylactic aciclovir
- received VZIG/IVIG in the past 6 weeks
- within 12 months of haematopoietic transplant

³See Appendix 1 for Group Classification

Reference: Public Health England Guidance for issuing varicella-zoster immunoglobulin (VZIG); October 2016
Authors: Dr Angel Boulos, Dr Matthew Costley
### Group A
- 6 months post chemotherapy/radiotherapy and not in group B
- Haematopoietic stem cell transplant and not in Group B
- Children on Prednisolone (or equivalent) currently or last 3 months
  - 2mg/kg/day for one week
  - 1mg/kg/day for one month
- Adults on Prednisolone (or equivalent) currently or last 3 months
  - >40mg/day for more than 1 week
  - >20mg/day for more than 14 days
- Non biological oral immunomodulators currently or within last 3 months
  - Methotrexate >25mg/week
  - Azathioprine >3mg/kg/day
  - 6-mercaptopurine >1.5mg/kg/day
- Patients with HIV and CD4 count <200 cells/µl with no diagnosis of AIDS

### Group B
- Patient on treatment for acute lymphoblastic leukaemia until at least 6 months after completion of immunosuppressive chemotherapy
- Lymphoproliferative disorders with on-going follow-up including
  - Indolent lymphoma
  - Leukaemia
  - Plasma cell lymphoma
- Patients on immunosuppression currently or in the last 6 months for a solid organ transplant
- Severe primary immunodeficiency
- Patients who have received a haematopoietic stem cell transplant until
  - 24 months post transplant
  - 12 months off all immunosuppressive treatment
  - longer in patients with graft versus host disease
- Patients on immunosuppressive drugs/biological therapies until 6 months after terminating treatment including:
  - Cyclosporin, cyclophosphamide, leflunomide
  - Monoclonal antibodies e.g. alemtuzumab, ofatumumab and rituximab
  - Cytokine inhibitors e.g. etanercept
- Patients with a diagnosis of AIDS

Reference: Public Health England Guidance for issuing varicella-zoster immunoglobulin (VZIG); October 2016
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