

A SURVEILLANCE STUDY OF CONGENITAL AND HOSPITALISED NEONATAL VARICELLA

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| Abstract | Fetal varicella syndrome (FVS) is a rare but devastating consequence that can occur when a non-immune woman is exposed to chickenpox in pregnancy. In utero infection with chickenpox can result in stillbirth, premature birth, and the life-long consequences of FVS, which may include limb problems, visual impairment and learning disabilities. Neonates who contract chickenpox in the first month (neonatal varicella) of life can have similarly severe consequences, often requiring hospitalisation for sequelae affecting their respiratory and nervous systems. This study will collect data on the number of cases, severity and treatment of fetal varicella syndrome and neonatal varicella. |
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| Website | www.rcpch.ac.uk/bpsu-study-varicella |
| Background | A safe and effective chickenpox vaccine has been developed but not implemented as part of routine UK immunisation programmes. As FVS and neonatal varicella are not notifiable illnesses, currently data are not collected regarding infection rates, treatment, and associated morbidity/mortality. Thus information is lacking regarding the burden of chickenpox in these extremely vulnerable groups. This study will fill this data gap, which will help inform public health interventions, guide decisions about the benefits and cost effectiveness of introducing the vaccine to routine vaccination schedules, and describe short term outcomes and treatment for these conditions in the UK. |
| Coverage | United Kingdom, with a parallel study in Portugal |
| Duration | 13 months |
| Research Questions | <ul style="list-style-type: none">• What is the incidence of fetal varicella syndrome (FVS) and hospitalised neonatal varicella infection in the UK?• What are the morbidities and mortalities associated with FVS and neonatal varicella in the UK.• To describe the management of neonates with FVS and neonatal varicella.• To describe the short-term outcomes (at discharge) of neonates with FVS and neonatal varicella (case fatality rate, days of hospitalization, birth defects).• To describe the prophylaxis (if any) that was given to their mothers whilst pregnant. |
| Case definition | <p>Fetal varicella syndrome:</p> <p>1a) Any stillborn or liveborn infant who, in the opinion of the notifying paediatrician, has confirmed or suspected fetal varicella syndrome, with or without congenital deformities based on history, clinical and/or laboratory findings.</p> <p>1b) Any infant that presents with herpes zoster (shingles) in the first year of life (based on clinical and laboratory findings)</p> <p>1c) Spontaneous abortion or termination of pregnancy following varicella in pregnancy.</p> <p>Neonatal varicella syndrome:</p> <p>1) Chicken pox in an infant less than 1 month of age, regardless of gestational age at birth, based on history, clinical findings and/or laboratory findings.</p> |
| Reporting instructions | Please report any liveborn infant, stillbirth or termination of pregnancy that, in your opinion, had fetal |

varicella infection. This will include any infant less than a year old who develops shingles.

Please also report cases of varicella diagnosed in the first 28 days of life.

Please report all suspected cases, even if the results of investigations are pending.

Methods

Clinicians who report a case of fetal varicella syndrome or neonatal varicella syndrome via the orange card will receive a single questionnaire on the dedicated BPSU online reporting system, to be completed by reporting clinician.

Ethics approval

REC, CAG, PBPP, PAC

Support group

Bliss

Funding

ESPID/INOPSU

References

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