

Overall there is good adherence to guidance but simple measures such as a proforma, patient leaflet and personalised allergy action plan available for printing with the local guideline could further optimise patient care. A re-audit to assess the impact of these interventions is planned for 2015.

**G445(P) DIAGNOSIS OF AN INFECTIOUS PROCESS IN NEWBORNS BORN BY MOTHERS WITH CHRONIC INFLAMMATORY GYNAECOLOGICAL DISEASES**

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**Aims** To study indices of the cytokine state in umbilical blood of newborns born by women with chronic inflammatory gynaecological diseases in case of a late manifestation of the infectious process.

**Methods** 37 newborns born by women with chronic inflammatory gynaecological diseases were examined. The levels of interleukin-2 (IL-2), tumour necrosis factor (TNF- $\alpha$ ), interferon gamma (IFN- $\gamma$ ) in umbilical blood were analysed using a kit for the enzyme-linked immunosorbent assay ProConIL-2, IFN-gamma, TNF- $\alpha$  ("Protein Contour" Limited Liability Company, St. Petersburg).

The following software packages were used: Statistica version 6.0 and EXCEL 2003, SPSS 13.0, MegaStat. PolyAnalyst 3.5 Pro package was used for the analysis of multidimensional nonlinear dependences.

**Results** Manifestations of the infectious process were not observed in all newborns within the first month of their life. From the end of the first month and up to the third month of life, clinical presentations of the infection, including viral infection, were observed in 15 newborns, cytomegalovirus DNA was detected in urine analyses that allowed diagnosing cytomegalovirus infection. In 22 newborns no clinical presentations of the infection were recorded. The control group was comprised of 15 newborns without infection.

Analysis of multidimensional nonlinear dependences using "PolyAnalyst 3.5. Pro" package has shown factors which are significant for prognosis of the infectious process in the postnatal period: IL-2, TNF- $\alpha$ , IFN- $\gamma$ . Formula of dependence of the infectious process prognosis on the content of IL-2, TNF- $\alpha$ , IFN- $\gamma$  in umbilical blood of newborns born by mothers with chronic inflammatory gynaecological diseases in case of a late detection of cytomegalovirus DNA was suggested: IL-2\* TNF- $\alpha$  < -527.79 + 4.1342\* IFN- $\gamma$  \* TNF- $\alpha$ .

If this inequality is fulfilled, we prognosticate an infectious process in the postnatal period. Accuracy is 85%. If this inequality is not fulfilled, the infection will not develop. Accuracy is 91%. P < 0,000001. Sensitivity is 87%, specificity is 91%. Positive predictive value is 9.6; negative predictive value is 7.

**Conclusions** The formula is an early marker of the infectious process manifestation in newborns born by mothers with chronic inflammatory gynaecological diseases and it allows separating children of the risk group for the appropriate therapy prescription.

**G446(P) PROMOTING ENGAGEMENT OF CHILDREN AND YOUNG PEOPLE IN ALLERGY CLINIC VIA REAL TIME FEEDBACK TOOLS AND SOCIAL MEDIA**

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**Background** Research shows that patients consider their overall experience of care to be of equal importance in quality, alongside clinical effectiveness and safety.<sup>1</sup> The NHS constitution commits providers to encourage and welcome feedback on patients' healthcare experiences.<sup>2</sup> The difficulty of hearing the voices of children and young people as users of NHS services is widely acknowledged, and finding better ways to collect feedback from children and developing the use of IT in feedback have been identified as key priorities.<sup>3</sup>

**Aim** We aimed to improve the collection of patient feedback in our district general hospital allergy clinic to promote engagement of children, young people and families.

**Methods** All children, young people and families attending a district general hospital 'one stop' multidisciplinary children's allergy clinic were invited to submit real time feedback using a 'business card' feedback tool. Participants were encouraged to submit brief one or two word feedback. Responses were then summarised using a 'word cloud' and were made freely available on social media and displayed weekly in allergy clinic. Patients and families are also invited to submit feedback via twitter.

**Results** The real time feedback tool has now been running for 18 months. Seasonal themed word clouds are generated to capture the attention of children and young people. Following a number of comments regarding the length of waiting time, pre-clinic information has now been developed to give more information on what to expect on the day of the appointment, including expected duration of visit.

**Conclusion** Collection of real time feedback using a business card tool and displaying via a word cloud on social media is a novel, feasible and popular method of collecting patient feedback in a paediatric allergy clinic which has led to service improvement and aligns with NHS priorities for engagement with children and young people.

**REFERENCES**

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- 2 NHS Constitution, Department of Health 2013
- 3 Evans R. Celebrating the best of children and young people's experience of care. Patient Experience Network, NHS England, September 2013

**G447(P) THE INNATE IMMUNITY FACTORS IN CASE OF INTRAUTERINE HERPETIC INFECTION**

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**Aim** To reveal the role of innate immunity factors in the development of the generalised herpetic infection (HSV-1 and HSV-2) in newborn babies.