the oral penicillin challenge test can be safely performed in the community clinic setting.

**Methods** In this retrospective study the electronic medical files of 402 study participants, of ages 0–17, were reviewed. The included patients were those flagged as allergic to penicillin, referred to a community allergy clinic between 2011–2018, were evaluated by an allergist, and underwent a penicillin or amoxicillin challenge test. The challenge test results were collected and reviewed for documentation of allergic reactions. None of the children had undergone an allergy skin or blood test prior to the challenge test. In addition, the medical files were reviewed for documentation of later use of penicillin derivatives after the challenge test.

**Results** Apart from a single vomiting incident during the challenge test, none of the challenge tests elicited any responses. Eighty-two (26%) children who underwent the challenge test, used penicillin again at a later stage. Repeat diagnosis of penicillin sensitivity was recorded for 7 (3%) children, following onset of rash following exposure to penicillin after the challenge test.

**Conclusions** The vast majority of penicillin allergy diagnoses among children are inaccurate, as the rash appearing during use of the medicine is unrelated to an acute allergic reaction. Viral diseases can be a significant factor underlying these rashes. The oral penicillin derivative challenge test performed in community clinics are safe, and should therefore be preferred for any child presenting late-onset rash during penicillin treatment. Widespread use of this challenge test will assist in reducing extraneous use of broad-spectrum antibiotics and resistance to these drugs.

**P10 MANAGEMENT OF SEVERE ATOPIC AND VERNAL KERATOCONJUNCTIVITIS**

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**Background** Vernal keratoconjunctivitis (VKC) and atopic keratoconjunctivitis (AKC) are severe allergic diseases of the ocular surface which can have sight-threatening complications such as shield-shaped ulcers and plaques.

Paediatricians, general practitioners and optometrists play an important role in the early detection of severe VKC and AKC to ensure swift referral to an eye clinic for treatment with topical or oral immunosuppressants or modulators and, if required, surgical intervention.

**Purpose** To evaluate the indications for oral corticosteroid treatment, as an indicator of severe inflammation requiring systemic immunosuppression, in the management of VKC/AKC in children, and to describe treatment outcomes.

**Methods** We reviewed the medical records of children up to the age of 16 years who had been prescribed oral corticosteroids for VKC/AKC at a tertiary referral centre in the UK between 2008 and 2018. We noted age, gender, severity of corneal epithelial disease (Cameron and Moorfields grading systems), proportion of ulcers healed within 2 weeks of starting oral corticosteroids, proportion of children requiring surgical intervention, and time from starting steroids to epithelialisation. In children who received oral steroids on more than one occasion, we included the first episode only.

**Results** We identified 16 children and young people (median age 11.5 years, interquartile range 9–14); 15 (94%) were boys.

Seven (44%) children with severity grade 1 Cameron/2 Moorfields had received oral corticosteroids in addition to topical eye drops; re-epithelialisation in under 14 days was achieved in 86% (6/7), while 14% (1/7) required additional superficial keratectomy. Seven (44%) patients with severity grade 3 (established plaque) received oral steroids; in four it was supplementary to superficial keratectomy, given for anti-inflammatory purposes, and to prevent recurrence of the ulcer due to uncontrolled inflammation. In three, elective keratectomy was not carried out initially; one plaque ulcer resolved spontaneously, while two did not re-epithelialise and required surgery 48 and 63 days after oral steroids were started. Two (13%) patients with low-grade lesions received oral therapy due to imminent risk of progression. Re-epithelialisation time was measured for one of these patients and found to be under 14 days.

**Conclusions** The clinical signs of severe VKC/AKC which require topical and/or systemic corticosteroids can be detected without specialist equipment, by instillation of fluorescein eye drops. Swift referral to an eye clinic allows timely treatment and optimises outcomes. We propose a simple algorithm to guide management.

**P11 SECONDARY LACTOSE INTOLERANCE AND COW’S MILK PROTEIN ALLERGY IN INFANTS**

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**Introduction** Cow’s milk protein allergy (CMPA) is one of the causes of secondary lactose intolerance (SLI) in infants. The aim To determine the possibility of faecal tests: calprotectin, ECP and hidden blood in the stool for the diagnosis of gastrointestinal manifestations of CMPA in infants with SLI.

**Patients and methods** 30 children, aged from 1 to 5 months, full-term born, suffering from infantile colic and gastrointestinal disorders due to lactose intolerance, confirmed by FOBT the background of cow’s milk protein intolerance, were observed. 63.33% of children were breastfed, 36.67% were mixed, received medical infant formula.CMPA in examined participants was diagnosed based on recommendations of EAACI (2014) and CoMiSS scale. SLI was confirmed by FOBT, which was carried out by spectrophotometric measurement of the concentration of Na + and K + ions. Calprotectin and ECP in the stool were determined by ELISA. To detect the hidden blood in the stool, out-of-point «Colon View» test was used. The control group consisted of 10 healthy similar aged, breastfed infants. Statistical analysis was carry out using Stat Soft Statistica 12.0. for Windows-10.

**Results** Participating children suffered from colic in 86.67%, regurgitation in 56.67%, diarrhea in 83.33%, ishesion in 46.67%, constipation in 13.33%, blood streaks in the stool in 13.33%, atopic dermatitis in 73.33%. All had a combination of two or more gastrointestinal disorders.

The average level of FOG in CMPA was higher than in healthy ones (204.94 ± 23.56 Osmol/kg. And 116.52 ± 65.8 Osmol/kg; P <0.001). Average values of calprotectin (463.89