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 col-
clected 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 chal-

tenge 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 peni-
cillin sensitivity was recorded for 7 (3%) children, following
onset of rash following exposure to penicillin after the chal-

lenge 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 pre-
ferred 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 ker-
atoconjunctivitis (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 onwards referral to an eye clinic for
treatment with topical or oral immunosuppressants or modula-
tors 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 corticoste-
roids 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 start-
ing oral corticosteroids, proportion of children requiring surgi-
cal 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
topic 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 keratec-
tomy 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: calprotec-
tin, ECP and hidden blood in the stool, out-of-point «Colon View»
detect the hidden blood in the stool, out-of-point «Colon View»
test the background of cow

Patients and methods 30 children, aged from 1 to 5 months,
full-term born, suffering from infantile colic and gastrointesti-
nal disorders due to lactose intolerance, confirmed by FOG
test 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
FOG, which was carried out by spectrophotometric measure-
ment of the concentration of Na + and K + ions. Calprotec-
tin 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 simi-
lar aged, breastfed infants. Statistical analysis was carry out

Results Participants suffering 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

Abstracts