Using Pearson Chi Square test to evaluate the correlation
between children with monosensitisation and polysensitisation
with the degree of control asthma we have obtained a p value
> 0.05, statistically insignificant.

Using Pearson Chi Square test to evaluate the correlation
between children with < 2 exacerbations and ≥ 2 exacerbations
with mono and polysensitisation in children with allergic
asthma we have obtained a p value > 0.05, statistically
insignificant.

Conclusion In this study of children with atopic asthma,
mono and polysensitisation does not influence the degree con-
trol and also hasn’t influenced the asthma exacerbations dur-
ing one year.

P14 EGGSTRA SPECIAL TREATMENT: IN HOSPITAL FOOD
CHALLENGES FOR EGG ALLERGY: ARE WE DOING TOO MANY?

Aim To assess compliance of our paediatric department with
internationally recommended standards for the assessment and
management of egg allergy.

Methods Written records of all egg challenges performed in a
paediatric assessment unit were collected from 2013–2018. We
divided reactive symptoms into three categories; GI, respira-
tory (mild wheeze) and mucocutaneous involvement. We com-
pared the reactions in children with pre-existing risk factors
to those without. The British Society for Allergy and Clinical
Immunology (BSACI) recommends that children with mild egg
reactions have incremental forms of egg at home. They rec-
comment in-hospital food challenges are reserved for children
with co-existing asthma or previous anaphylaxis. We compared
our practice with their 2010 egg allergy management
guidelines.

Results There were 161 challenges over five years. 92% of
those challenged passed (n=149). 27.9% (n=45) had no
reaction. 42 charts were available for more detailed
assessment.

In the charts reviewed 47% (n=20) had asthma and 57%
(n=24) had previous history of anaphylaxis. Of those with
asthma, 73.6% (n=14) passed the challenge and 26% (n=5)
failed and developed anaphylactic symptoms. The median age
of those who failed in this asthma cohort was 9.4yrs and
10.7yrs in those that passed. One patient developed all three
symptoms, and 9 developed two symptoms. In the non-asthma
cohort (n=22) two patients developed all three, 11 had two
symptoms, six patients had one symptom.

Of the 24 children with an anaphylaxis history 79%
(n=19) passed the challenge and 20.8% (n=5) failed - all of
whom also had asthma. Older patients were more likely to
pass – median age 11 vs 9.7yrs.

Conclusion The natural course of egg allergy is to diminish
with age. This combined with the BSACI recommendation
that clinical diagnosis is sufficient for most children who
are not high-risk, removes the need for in-hospital food
challenges. Our results show older children were more
likely to pass reinforcing the predictability of the natural
history. We also showed that even in the ‘at risk’ group a
high percentage were passing and their reactions weren’t
significantly worse than those without asthma. We cur-
cently do not implement BSACI guidelines. This is expen-
seive and may preclude true high-risk candidates from
specialist assessment. This study raises some questions:
Could children with mild asthma be observed reintroducing
baked egg rather than going through a formal challenge? Is
it possible to predict who is going to react from risk
factors?

P15 FORMATION OF FOOD ALLERGIES IN CHILDREN BORN
TO MOTHERS WITH BRONCHIAL ASTHMA

Introduction Infants with at least one biological parent who
has allergic conditions are at risk for developing allergic dis-
case. Caesarean born infants have a more slowly diversifying
microbiota, with differences reported from normally born
infants. This, in turn, can affect immunophysiological develop-
ment with a heightened allergic disease risk.

The aim of this study was to investigate the impact of
birth mode of delivery on childhood asthma and allergic dis-
cases in children from mothers with moderate persistent
asthma.

The study included 68 mother-child pairs. 22 children
(main group) were born by Caesarean section, and 46 children
(comparison group) were delivered vaginally. Pregnant women
were included in the study with a gestation period of 32–38
weeks. Children were observed in the maternity hospital (1,
3–4 days), then monthly until the age of 1 year with a clin-
ical assessment of the child’s health. The presence, age of
onset of symptoms, severity (prevalence) of skin (atopic der-
matitis, urticaria, angioedema) and respiratory manifestations
of allergy (rhinitis, wheezing with or without Viral Upper res-
piratory infection; croup; chronic cough). Mathematical-statisti-
cal data processing was carried out using the program
Statistica 10.0 for Windows-10. The criterion for statistical
significance was p < 0.05.

Results In the group of children born by caesarean section,
severe regurgitation was significantly more frequent (53% and
29%, p < 0.05), flatulence persisting for up to 6 months
(82% and 68%, p < 0.05), colic lasting longer than 3 hours
(93% and 28%, p < 0.05), dyschezia (59% and 33%,
p < 0.05), loose stools (86% and 57%, p < 0.05),
mucus in the stool (100% and 73%, p < 0.05),
appeared in
1–2 weeks of life (68% and 45%, p < 0.05), skin manifesta-
tions of allergy (95% and 74%, p < 0.05), included
76% and 53%, p < 0.05), chronic cough (18% and 2%,
p < 0.05), the presence of the first episode of weezing at 4–5
months (71% and 53%, p < 0.05), 2 episodes of weezing
in the first year of life (86% and 20%, p < 0.05), the presence
of croup at the age of 3–6 months (80% and 0%,
p < 0.05), 2 episodes of croup in the first year of life (40%
and 14%, p < 0.05).

Conclusion For children with a positive family history of
atopic diseases caesarean section can be assumed as an epige-
netic factor, contributing to an earlier and pronounced mani-
festation of not only gastrointestinal, but skin and respiratory
symptoms of allergic disease.