included skin manifestations inherent to giardiasis: paleness, cheilitis, hyperkeratosis follicularis punctata and prolonged skin itching. As a result of reflex and toxicoallergic actions of Giardia, a syndrome of chronic endointoxication has prompted emergence of dyskinesia of the gallbladder and sphincter apparatus in 75% of patients with subsequent inflammation of the gastrointestinal tract (in 48% of patients). That further increased an antigenic load on their immune systems. SCORAD index in 22 infected children showed moderate severity of atopic dermatitis, whereas 18 patients proved to have a severe form.

Conclusion The analysis has shown that 27% of patients with atopic dermatitis were infected with giardiasis. These data require a use of a complex approach to the therapy of atopic dermatitis, more thorough examination of children for any pathology of the gastrointestinal tract, particularly, the examination of helminths.

859 DERMATOLOGIC IMMUNE RECONSTITUTION INFLAMMATORY SYNDROME (IRIS) IN CHILDREN RECEIVING ART FROM A COMMUNITY OUTREACH PROGRAM IN KAMPALA

doi:10.1136/archdischild-2012-302724.0859

[1]A Bagenda, [2]J Mbabazi, [3]M Nalubega-Mboowa. *[1]International Health Sciences University, Entebbe; [2]Department of Peadiatrics and Child Health, Mulago Hospital Kampala; [3]Health Policy and Management, International Health Sciences University, Kampala, Uganda*

Background Orikiriiza (2011) demonstrated that dermatological manifestations were the most common IRIS events in children receiving ART. We aimed to find the incidence of dermatological-IRIS in children receiving ART for at least 12 weeks.

Methodology Retrospective review of medical charts for children who received ART between January 2010–December 2011. Non-adherent and regimen switch children excluded.

Results Total of 110 charts; median age 5.9 years (IQR 9.1months-11.9years).70 females (63.6%). 85children (77.2%) baseline WHO stage III/IV. All children received septrin. Median time on ART was 24weeks (IQR 13.2–40.8). Baseline CD4+% was < 15% for 77(70%), > = 15% for 33children. Viral load >399,000 copies were 76 children (69.1%) and < = 399,000 for 34 children. PPE had the highest incidence (47cases) after ART initiation. 10cases of verrucae planae, 9 Kaposi Sarcoma, Herpes Zoster and Tinea corporis each, 8molluscum contagiosum, 4tinea capitis, 3HSV and 1varicella zoster. Median time to develop PPE was 3weeks (IQR 10.3–50. 1days). Increasing age associated with IRIS; highest between 5–12 years (age correlated with degree of immunosuppression).

Viral load after 3 months; < 1log10 decrease for 45 children (40.9%), > = 1log10 decrease for 65children. Children who had > = 25cells/ul change in CD4+% (83 children) carried almost 3-fold risk for dermatologic -IRIS compared to children with < 25cells increase (69 Vs 9 cases [O.R 2.9 CI 1.40–11.02, p value 0.004]. No significant increased risk for dermatologic-IRIS based on viral load change.

Conclusion Prevalence of unmasking dermatological-IRIS was high. PPE accounted for highest mucocutaneous IRIS manifestations. Caregivers should be counseled about possible worsening of PPE with ART initiation.

860 EPIDEMIOLOGICAL FACTORS AND FOOD: WHICH IS THE ROLE IN HELICOBACTER PYLORI RE-INFECTION IN PEDIATRIC AGE?

doi:10.1136/archdischild-2012-302724.0860

T Sabbi. *ASL RMG, Rome, Italy*

Background *Helicobacter pylori* (Hp) infection has been recognized as a cause of chronic gastritis, peptic ulcer, atrophic gastritis and gastric cancer. Its acquisition is related with poor socioeconomic conditions while the relationship of nutrition and Hp is still a question.

Aim To analyzed if socioeconomic factors and dietary contribute to Hp re-infection in pediatric age.

Patients and methods 150 patients (92 males; age range 5–16 years) with Hp infection treated and eradicated in the past. 55 patients with Hp re-infection and 95 patients not re-infected.

We interviewed the children with questionnaire about socioeconomics factors, hygiene, living conditions and their dietary habits.

Results A lower frequency of fermented dairy food, fruits and vegetable consumption was registred among children with Hp re-infection as compared to not been re-infected.

Among persons with Hp re-infection were noted low socio-economic markers such as croweded living conditions, a large number of siblings and unclean water.

Conclusions Might decrease the risk of Hp re-infection the use of probiotic, vitamin C, antioxidants contained in fruit and vegetables.

Risk factors for Hp re-infection are low socioeconomics factors, hygiene and living conditions.

861 RSV HOSPITALIZATION IN INFANTS WITH NEUROMUSCULAR DISEASE IN THE CANADIAN REGISTRY OF SYNAGIS® (CARESS) FOLLOWING PROPHYLAXIS (2005–2011)

doi:10.1136/archdischild-2012-302724.0861

[1]B Paes, [2]A Li, [3]I Mitchell, [2]KL Lanctot. *[1]Paediatrics, McMaster University, Hamilton; [2]Medical Outcomes and Research in Economics (MORE), Sunnybrook Health Sciences Centre, Toronto, ON; [3]Paediatrics (Respirology Division), University of Calgary, Calgary, AB, Canada*

Background and Aims The Canadian Registry of Synagis® (CARESS) tracks palivizumab use and respiratory outcomes in high-risk infants, including those with neuromuscular impairments (NMI). We compared respiratory illness (RI) and respiratory syncytial virus positive hospitalization (RSVH) rates in NMI infants versus: 1) those with other underlying medical disorders (MD) and 2) those prophylaxed for standard indications (SD).

Methods A prospective, observational registry of infants from 30 Canadian sites who received ≥1 dose of palivizumab during the 2005–2011 RSV seasons. Utilization and RI events were collected monthly throughout each season.

Results 10452 infants were recruited (NMI: 118, 1.1%; MD: 1443, 13.8%; SD: 8891, 85.1%). There were statistically significant group differences ($p<0.05$) in: enrolment weight and age, gestational age, birth weight, proportions of: Caucasians, daycare attendance, smoking exposure, siblings, multiple birth, >5 individuals in the household, and history of atopy. NMI infants tended to have a less complex neonatal course. Compliance was similar across the three groups. The NMI group had higher RI hospitalization rates than MD or SD (17.8% versus 9.6% and 5.8%, $p<0.0005$), as well as RSVH (5.62% versus 1.98% and 1.49%, $p<0.0005$). A Cox proportional hazard analysis showed that having NMI increased the risk of first RSVH compared to infants in the SD group (hazard ratio=4.47, 95% CI 1.96–10.18, $p<0.0005$).

Conclusions NMI infants comprise a very high risk cohort for RI and RSV-related hospitalization and should be considered for palivizumab prophylaxis to reduce incurred morbidities as recommended by the American Academy of Pediatrics and other international advisory bodies.

862 RSV HOSPITALIZATION IN ABORIGINAL INFANTS IN THE CANADIAN REGISTRY OF SYNAGIS® (CARESS) FOLLOWING PROPHYLAXIS (2005–2011)

doi:10.1136/archdischild-2012-302724.0862