[1]M Groselj-Grenc, [1]M Derganc, [2]AN Kopitar. *[1]Department of Paediatric Surgery and Intensive Care, University Medical Centre Ljubljana; [2]Institute of Microbiology and Immunology, Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia*

Background and Aims Children with temporary external ventricular drains are prone to nosocomial infections. Diagnosis of bacterial ventriculitis in these children is challenging due to frequent blood contamination of cerebrospinal fluid (CSF), presence of chemical ventriculitis and elevation of blood laboratory markers by concomitant bacterial infection. Therefore determination of novel marker of bacterial infection CD64in in CSF seems to be promising.
Methods We conducted a prospective, observational pilot study enrolling children with external ventricular drainage at surgical ward and paediatric intensive care unit. CD64in in CSF together with CSF leukocyte count, glucose, proteins and blood leukocyte count, CRP, PCT were studied at the time of suspected ventriculitis. CD64in was measured by flow cytometry (Trillium Diagnostics, LLC, Brewer, ME).
Results Ten episodes of clinically suspected ventriculitis in 6 children (male 4, female 2, median age: 9 months, range: 4–167 months) were observed during a 6-month period. Episodes were classified into those with microbiologically proven ventriculitis (5 episodes) and into those with microbiologically negative CSF (5 episodes). CD64in was significantly higher in episodes with ventriculitis in comparison to episodes without ventriculitis (Table). Other blood and CSF markers did not differentiated between groups.

Cerebrospinal fluid markers	Ventriculitis group Median (range)	No-ventriculitis group Median (range)	p Student's *t*-test
Neutrophil CD64 index	2.44 (1.59-5.78)	1.09 (0.73-1.73)	0.0266
Leukocyte count (x10⁶/L)	448 (219-1595)	140 (10-250)	0.0811
Percentage of neutrophils (%)	70 (39-85)	61 (21-89)	0.7560
Glucose (mmol/L)	2.0 (0.2-3.7)	2.8 (1.7-4.1)	0.2847
Proteins (g/L)	1.51 (0.94-3.41)	1.30 (0.23-2.0)	0.3117

Abstract 928 Figure 1 CSF markers in diagnosing bacterial ventriculitis

Conclusions CD64in might be a useful diagnostic marker of bacterial ventriculitis in children with external ventricular drainage before microbiological confirmation. A larger study is needed in the future.

929 SCREENING FOR TUBERCULOSIS WITH A TUBERCULIN SKIN TEST IN BCG VACCINATED INTERNATIONALLY ADOPTED CHILDREN

doi:10.1136/archdischild-2012-302724.0929

[1]T Boiy, [1]J Ramet, [1]S Verhulst, [1,2]M Wojciechowski. *[1]University of Antwerp, Antwerp University Hospital, Edegem; [2]Institute of Tropical Medicine, Antwerpen, Belgium*

Background and Aims Between 1/1/2008 and 31/3/2012, 314 internationally adopted children were seen at the Institute of Tropical Medicine in Antwerp. Screening for tuberculosis is mandatory as most of these children come from countries with a high TB prevalence. Since many of these children had a BCG vaccine around birth, the interpretation of the tuberculin skin test (TST) is a matter of debate. We want to provide additional evidence supporting the statement that the interpretation of the TST is independent of previous BCG vaccination in high risk populations.
Methods TST was performed in 297/314 children. Results were reported back in 269: 154/170 children that had received BCG vaccination and 115/157 who had not been vaccinated.
Results 10/154 (6.4%) children with BCG vaccination and 6/115 (5.2%) of children without BCG vaccination had a positive TST reaction (≥10 mm diameter wheel). There is no significant difference between these 2 groups (chi-square p=0.7). 3/10 and 2/6 of these children had signs of TB on chest radiography.
Conclusions There is no significant influence of BCG vaccination on TST result in children coming from high-prevalence countries. TST should therefore not be omitted in the diagnostic work-up for TB in these children.

930 ESTIMATION OF THE PREDICTIVE VALUE OF EOSINIOHILIA FOR INTESTINAL PARASITIC INFECTION IN INTERNATIONALLY ADOPTED CHILDREN

doi:10.1136/archdischild-2012-302724.0930

[1]T Boiy, [2]A Van Gompel, [1,2]M Wojciechowski. *[1]University of Antwerp, Antwerp University Hospital, Edegem; [2]Institute of Tropical Medicine, Antwerpen, Belgium*

Background and Aims Eosinophilia may be associated with parasitic infection. To our knowledge the predictive value of eosinophilia has not been determined in internationally adopted children (IAC).
Methods Eosinophilia definition: absolute count ≥ 450/µl. Eosinophil counts were available in 285/314 IAC seen between 01/01/2008 and 31/03/20012. Feces and serological examinations for Strongyloides and Schistosoma were done in all children. We calculated the positive predictive value, negative predictive value and likelihood ratios of eosinophilia ≥ 450/µl for all parasites, solely pathogenic and solely tissue invading parasites in all 285 and 197 Ethiopian children.
Results

Abstract 930 Table 1 All 285 children

	Any parasites	No parasites	Pathogenic parasites	No pathogenic parasites	Tissue invading parasites	No tissue invading parasites
Eosinophils ≥ 450	65	13	60	18	37	41
Eosinophils < 450	129	78	99	108	40	167
PPV	83%		77%		47%	
NPV	38%		52%		81%	
LR+	2.35		2.64		2.44	
LR-	0.78		0.73		0.65	

Abstract 930 Table 2 197 Ethiopian children

	Any parasites	No parasites	Pathogenic parasites	No pathogenic parasites	Tissue invading parasites	No tissue invading parasites
Eosinophils ≥ 450	59	9	54	14	33	35
Eosinophils < 450	92	37	72	57	30	99
PPV	87%		79%		49%	
NPV	29%		44%		77%	
LR+	2		2.17		2.01	
LR-	0.76		0.71		0.64	

Conclusion In this population the predictive value of eosinophilia is weak for parasitic infection.

931 INTESTINAL PARASITES IN INTERNATIONALLY ADOPTED CHILDREN IN BELGIUM

doi:10.1136/archdischild-2012-302724.0931

[1]T Boiy, [2]M Van Esbroeck, [1,2]M Wojciechowski. *[1]University of Antwerp, Antwerp University Hospital, Edegem; [2]Institute of Tropical Medicine, Antwerpen, Belgium*