Methods: A total of 292 ESBL or AmpC-producing Escherichia coli clinical isolates were collected from five children’s hospitals from 2005 to 2006. The MICs of 9 antimicrobial agents were determined by agar dilution. qnrA, qnrB, qnrS, aac(6’)-Ib-cr, qepA genes and ESBL or AmpC-encoding genes were detected by PCR. Conjugation was used to confirm whether PMQR genes and ESBL or AmpC-encoding genes were transferred together. PFGE was used to investigate the clonality of PMQR-positive isolates.

Results: qnrA-, qnrB- and qnrS-type genes were detected in 3 (1.0%), 3 (1.0%) and 6 (2.1%) of the isolates, respectively. A total of 24 (8.2%) isolates were found positive for aac(6’)-Ib-cr, of which 10 (3.5% of 292) had the -cr variant. There was no isolates positive for qepA. The resistance rate against ciprofloxacin was 55%. In 10 aac(6’)-Ib-cr isolates, 9 were co-produced CTX-M-14, and 1 co-produced CTX-M-15. Conjugation revealed that PMQR genes and bla genes were transferred together.

Conclusions: A low qnr genes carriage rate were found in those strains. However, there was a closed relationship between PMQR genes and β-lactamase genes, as well as a high resistance rate against ciprofloxacin.

PP-161 CD4+CD25+ regulatory T cells suppress immune response to murine cytomegalovirus infection of mouse embryo fibroblasts
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Background: To explore the effect of Tregs on MCMV infection, and its possible mechanism.

Methods: A co-culture system of T cells and MCMV infected MEFs in the presence/absence of Tregs was established. The ratios of T cell subsets were analyzed by flow cytometry; the production of IFN-γ and IL-4 in supernatants was determined by double-antibody sandwich ELISA; the viral load of whole culture was quantified by plaque assay. The levels of TGF-β1 mRNA were determined by RT-PCR assay. The effects of TGF-β1 and IL-10 on Foxp3 protein expression and Treg ratio were determined by Western blot and flow cytometry, respectively.

Results: After co-culture for 3 days, the Treg ratio and Foxp3 mRNA level were both higher than those of pre-co-culture. Addition of Tregs to the co-culture systems significantly increased the viral loads in a dose-dependent manner. In the absence of Tregs, after co-culture of Tdep/Treq with MEF/MCMV for 3 days, MCMV dramatically promoted effector T cell subsets proliferation. When homologous Tregs were added into the co-cultures, the numbers of Tc1, Tc2 and Th1 were suppressed with correlated with increased ratio for Tregs. And the levels of IL-10 and TGF-β1 increased accordingly. Blockade of TGF-β1 partly reduced the Foxp3 protein level and Treg ratio.

Conclusions: MCMV infection could induce Treg expansion in vitro, and Treg might suppress effector T cell subgroups’s differentiation and functions with secreting IL-10 and TGF-β1.

PP-162 The characteristic of T cell subsets of hand, foot and mouth disease in part of Shandong in 2008
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Objective: To approach the value of T cell subsets of hand, foot and mouth disease (HFMD) in judgement pathogenetic condition and evaluation curative effect by analyzing the characteristic of T cell subsets of HFMD in part of Shandong in 2008.

Method: 140 cases of HFMD patients and 166 normal children for register in nursery anti-coagulate blood were collected. T lymphocyte subsets were detected by flowcytometry. It was compared with different age group of the characteristic of T cell subsets of HFMD, and analyzed the change of T lymphocyte subsets of patients with serious brainstem encephalitis.

Results: Compared with those of normal children, CD3+ and CD4+ T cell opposite percentage of HFMD patients decreased obviously. Both CD3+ and CD4+ T cell of different age group of patients also lessened notably (P<0.01), and the amounts of CD8+ T cell were not decreased markedly (P>0.05), except for the age group from 1 year 7 months to 2 years (P<0.05). CD3+ T cells, CD4+ T cells, and CD8+ T cells were depleted in patients with encephalitis, and the amounts of T8 cells decreased markedly. The opposite percentage T lymphocyte in patients with serious brainstem encephalitis was lower than without encephalitis.

Conclusion: T lymphocyte of HFMD were more seriously damaged than normal children. And the amount of T lymphocytic subsets were lower in HFMD with encephalitis than those patients without encephalitis. And T lymphocytic subsets can be see a adjunctive index for judgement pathogenetic condition and evaluation curative effect in HFMD.

PP-163 UTIs; microbial spectrum and antibiotics among Southeast Asian children
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Background: Urinary tract infections (UTIs) are the most common bacterial infections of childhood, accounting up to 10% among infants to 10% among teenagers. Throughout childhood, the risk is nearly 2% for boys and 8% for girls. UTIs account for more than 1 million visits to pediatricians’ offices every year. The study aim was to determine the spectrum of microorganisms and their sensitivities among children with UTIs.

Methods: Study was conducted at Holy-Family Hospital, Rawalpindi, Pakistan from January 2007 to December 2008. 100 children with fever for more than 1 week or less without any definite focus of infection were included. 66% were males. Mean age 5±4.3 years. Children already received antibiotics in previous 2 days, comatose, immunocompromised or with congenital urinary tract abnormalities were excluded. Non-invasive method of urine collection pads was used. Dipstick test was used to diagnose UTI among children aged >3 years while a sample was sent for urgent microscopy and culture among children aged >3 months but ≤3 years. Results were awaited before starting treatment, unless they were very systemically unwell.

Results: Escherichia coli (37.6%) and Klebsiella (31.4%) were the most common. Others were Proteus mirabilis (8.8%), Enterobacter (7.9%) and Staphylococcus aureus (5.3%). Maximum sensitivity was to co-amoxiclav (55%), cephalosporins (40%) aminoglycosides (35%) and quinolones (22%). Organisms showed maximum resistance to ampicillin, amoxicillin and nalidixic acid.

Conclusion: UTI is a common source of infection among children presenting with unexplained fever. Co amoxiclav/Trimethoprim/Sulfamethoxazole DS 500mg twice daily or cephalosporins can be started as an empirical agent that can be changed later according to the culture and sensitivity report usually Ciprofloxacin 250mg BD 3 times, Levofoxacin 250mg daily x 3 days or Amoxicillin 500mg TID x 7 days as second line drugs.