Conclusion: In establishing a diagnosis, besides the clinical inspection, there is a need for the laboratory and microbiology, which set the course for a right treatment. Exceeded use of antibiotics should be ceased when treating respiratory infections at children age without a valid bacterial contaminant.

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PARAINFLUENZA TYPE 3 COINFECTIONS - SERIOUS INFECTIONS?

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Introduction: Coinfections by parainfluenza type 3 virus (PIV3) are associated with bacterial pathogens and virus. It is not clear if these coinfections carry a worse prognosis.

Objective: To define PIV 3 infections and if coinfections determine a worse outcome.

Methods: Retrospective, descriptive study, from September 2009 to January 2010, of PIV3 infection in hospitalized children. The diagnosis was obtained by direct immunofluorescence on nasopharyngeal aspirates. Statistical analysis by EpiInfo, version 3.4.3.

Results: A total of 17 PIV3 infections were identified (22% of total nasopharyngeal samples). The median age was 16 months. Clinical diagnosis were pneumonia (7), bronchiolitis (3), laryngotracheitis (2), myositis (1), and other (4). Coinfection was detected in 5 children: 4 with bacterial pathogens - *Escherichia coli* (2); *Haemophilus influenzae* (1); *Streptococcus pneumoniae* (1) - and 2 with viral pathogens - metapneumovirus (1) and H1N1v (1).

Hypoxemia was the only complication in children with isolated PIV3 infection (4/12). Complications in coinfection occurred in 2/5 of children: hypoxemia in both patients, atelectasy and acute respiratory insufficiency with PIV3/metapneumovirus, and pleural effusion with PIV3/H1N1v/*Streptococcus pneumoniae*.

Children with coinfections had more days of fever (8,2 vs. 4,1 days; $p=0,17$) and hospitalization (12,6 vs. 7,7 days; $p=0,05$), but the rate of complications was not statistically significant.

Conclusions: Coinfections were common in children with PIV3 infection and were associated with longer hospitalization and higher severity of complications. Future prospective and extensive studies are needed to better define the impact of PIV3 coinfection in clinical outcome.

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COMPARING THE EFFECT OF METRONIDAZOLE AND SECNIDAZOLE FOR THE TREATMENT OF GIARDIASIS IN CHILDREN

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Giardiasis is one of the most common intestinal parasitic infection among children . It is a world wide and an important disease in Iran.

Abdominal pain, bloat, chronic or intermitant diarrhea and steaturrhea which cause malabsorption are the main clinical signs.

The etilogic agent is Giardia lamblia which is found in the form of trophozite

(pathogenic form) and cyst (infective form).

The infective form is Transmitted by water, direct contact, vegetables and flies In order to evaluate the efficacy of secnidazole (a new drug) and comparing with the effect of metronidazole, a study was undertaken over a 15 month period on 83 patients suffering from giardiasis in Imam Reza Hospital .

After a questionair was complited for each patient , the patients were treated with secnidazole (30 mg/kg single dose) and metronidazole (15 mg/kg tid for 7 days) randomly. Two weeks after the end of treatment , direct and formol- ether fecal examination was performed on 3 consecutive days for each child.

Examinations showed that secnidazole is effective in 94.4% and metronidazole is effective in 80% of infected children ($P < 0.05$).

Since secnidazole had milder side effects and was more effective in relation to metronidazole and it can be used in single dose it can be concluded as a better drug than metronidazole for treatment of giardiasis in childrens.

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6 MONTHS FOLLOW UP OF HIV-1 INFECTED CHILDREN WITHOUT TREATMENT: USE OF CD4/CD8 RATIO AS A MARKER OF DISEASE PROGRESSION

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Background: In this study we follow up children with perinatal HIV-1 infection who are not on antiretroviral therapy (ART). It aims to assess the relevance of laboratory markers of disease progression with immunological status in pediatric population at our tertiary hospital in Mumbai. The significance of CD4/CD8 ratio in predicting disease progression is analysed.

Methods: A retrospective analytical study on all HIV-1 infected children who presented to our hospital in the year 2006-2007 and could not afford ART was carried out.

Results: CD4/CD8 ratio was found to predict the worsening or improvement/no change of immune category of children within 6 months (p value=0.030). Those with an improvement or no change in immune category had a mean initial ratio of 0.62 ± 0.30 and those with a worsening of immune category had a mean initial CD4/CD8 ratio of 0.37 ± 0.25 . Thus children with a higher ratio showed better chances of improvement or maintain their immune category.

Conclusion: CD4/CD8 ratio may be used with caution as an adjuvant marker to CD4 count and CD4% to establish need of initiating antiretroviral therapy and for monitoring the immunological status and disease progression in HIV-1 infected children.

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ANTIMICROBIAL RESISTANCE PATTERNS OF SHIGELLA ISOLATES IN IRANIAN CHILDREN

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Background: Shigellosis is a major health problem in developing countries, causing more than 90 million episodes in Asia annually and sometimes results in death.

Objective: Evaluation of resistance patterns of Shigella isolates from children with acute diarrhea to commonly used antimicrobials.

Materials and methods: This prospective cross sectional study has been conducted on 71 hospitalized children affected with diarrhea with diagnosis of **Shigellosis** in Qazvin children hospital , Qazvin ,Iran in 2008. Stool specimens were received from study subjects and cultured. Isolates were confirmed by biochemical and serological tests. The isolates were tested for antimicrobial susceptibility by the disc diffusion method. Data was analyzed by using statistical methods.

Results: From a total of 71 children with **Shigellosis** 38(53.5%) were male and 33(46.5%) females. Mean age was 4.2 ± 1.8 years. The most common Shigella isolates were sonnei 58(81.6%), boydii 7(9.9%), dysenteriae 3 (4.2%) and flexneri 3 (4.2%). Resistance to antibiotics in isolates were: co-trimoxazole 54(76%), ampicillin 35(49.2%), nalidixic acid 32(45%),ceftriaxone23(32.3%), Cefotaxime 15(21.1%) and ciprofloxacin 4(6.4%).

Conclusion: High rate resistance of Shigella to multiple drugs such as nalidixic acid and third generation cephalosporins (ceftriaxone and cefotaxime) is worried. Continuous monitoring of resistance patterns among Shigella isolates is recommended.

Keywords: Antimicrobial Resistanse, Shigella, Children