

Conclusion: Cefaperazone-sulbactam was the most potent combination effective against 49% of isolates. 91% isolates were resistant to Piperacillin-tazobactam. Combinations having sulbactam were more effective as compared to others. It also supports the postulate that sulbactam, though not antimicrobial but does possess antibacterial activity against Acinetobacter species.

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Comparative evaluation of the Alpha Tec[®] NAC-PAC[™] Red against a conventional NALC-NaOH method for decontamination of sputum samples for tuberculosis testing

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Background: Decontamination methods for *M. tuberculosis* (MTB) diagnostics have evolved from robust methods to well formatted platforms with visualization of neutralization as well as decreased culture contamination rates. The NAC-PAC[™] Red (Alpha Tec, USA) is a new commercial decontamination method that contains NAC-PAC Red[™] (Sodium hydroxide) 3%, N-acetyl-L-cysteine (NALC) 300 mg, NPC-67[™] neutralization buffer and a pellet resuspension buffer with reported enhanced recovery of mycobacteria and lower contamination rates from processed sputum samples.

Methods & Materials: A comparative evaluation of 780 sputum samples from suspected MTB infected patients was performed. Samples were categorized according to time to processing (old > 3 days, new ≤ 3 days) and randomized into batches of 30 and processed with either NAC-PAC[™] Red or another conventional NALC-NaOH method. Percentage agreement among the two methods was determined.

Results: The NAC-PAC[™] Red method for the old samples (N=210), compared to the new samples (N=210), yielded a MTB culture positivity of 13.8% and 10.4% respectively and a culture contamination rate of 12.3% and 11.9% respectively. The conventional method for the old samples (N=150), compared to the new samples (N=210), yielded a MTB culture positivity of 9.3% and 9.5% respectively and a culture contamination rate of 16.6% and 8% respectively. Percentage agreement for recovery of *M. tuberculosis* for both methods, old samples and the new samples, was 67.4% and 91.5% respectively.

Conclusion: The NAC-PAC[™] Red method showed a higher MTB recovery rate and lower contamination rate from the old samples with similar results from new samples compared to the conventional method. This method can be recommended for use as an alternative to other conventional decontamination methods with the added benefit of a higher recovery and lower contamination rate of samples with a delayed processing time.

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Epidemiological considerations of febrile convulsion in Albanian children admitted in the service of the infection diseases



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Background: The aim was to present the epidemiologic data of the children with febrile convulsion, that have been treated in our service on the period from January 2011 - November 2013.

Methods & Materials: In this study have been taken in consideration 474 children of age 1 month to 14 years. The criteria for accepting the children in the department are based in the anamnestic data, clinical situation (evaluation of vital signs). The interpretation of the dates is done in relation with the type of infection, age, sex, place of living, annual frequency, treatment.

Results: From 6304 children treated in our clinic from January 2011 to November 2013, 474 or 7.5% resulted to have febrile convulsion. Febrile Convulsion as a first episode where found in 457 children or 96% and in 17 or 3.6% had repetitive crisis. From the cases 199 where female and 275 males respectively 42% and 58%. According to age the number of cases is divided into: 6 - 12 months 151 (31.85%), 12-24 months 167 (35.23%), 24-36 months 95 (20.05%), 36-48 months 36 (7.60%), 48-60 months 25 (5.27%) By pathology we found febrile convulsions as below: viral infections 45.7%, otitis media 8.5%, tonsillitis 12%, infections of respiratory tract 3.9%, diarrhea 3.6%, infection of urinary tract 1.2%, Meningitis 1.8%, unknown 20.4%. 327 or 69% were treated with Diazepam in the urgency or the convulsion was stopped without any medicament, 147 children or 31% the convulsive crisis was present at the moment of admission. 86 children or 58.50% had a generalized convulsive crisis and 34 children or 23.13% had partial simple crisis, 2 children or 1.36% were presented with epileptics status. Benzodiazepines have a high efficiency on stopping of the crisis, where 75% of the children have improved with the first dose of diazepam.

Conclusion: The diseases that appear in the age 9 month -5 years are very often are accompanied with febrile convulsion, particularly in the children with viral infections. The temperature is septic with 3-4 points in 24 hours.

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