age of 15 years old residing in the visited indigenous communities was examined. Secretions of the pharynx and attempts to obtain samples of sputum by expectoration in children older than 10 years old was carried out in all highly suspected pulmonary TB cases. Serum samples were obtained from 39 untreated children patients, and 78 healthy children. ROC curve analysis was used to calculate the sensitivity and specificity of each antigen for antibody detection.

Results: The results revealed no case of HIV-positive TB among Warao children. Bacteriological confirmation had 8.8% sensitivity, Ag85A peptides showed better sensitivity and specificity than ESAT-6 peptides; anti-29880 peptide test was found to be showing highest sensitivity of 100.0% (Negative Predictive Value, NPV = 100) but a low specificity of 20.8%. Two tests were highly specifics, anti-11003 had 97.4% specificity (Positive predictive Value, PPV = 85.7) and 32.4% sensitivity and anti-10999 had 96.2% specificity (PPV = 86.4) and 48.7% sensitivity. Compared to bacteriological tests, sensitivity of a combination that included a two-antigen ELISA (29880 and 11003 synthetic peptides) was significantly higher, $p < 0.0001$.

Conclusion: Our results demonstrate that the potential of combinatorial use of antibodies directed at different epitopes of Ag85A protein could provide a screening strategy for developing a multi-antigen ELISA, which allows an increase in the diagnostic accuracy of pulmonary TB in Warao childhood population.

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Specificities of the APTIMA Combo 2 and ProbeTec for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in oropharyngeal and rectal specimens from MSM

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Background: Nucleic acid amplification tests (NAATs) are not FDA-cleared for diagnostic testing of chlamydial (CT) or gonococcal (GC) infection in extragenital sites. In men who have sex with men (MSM), CT and GC infections of the oropharynx or rectum may be common. There have been some concerns about false-positive NAAT results from these sites. We evaluated the APTIMA Combo2 (AC2, Gen-Probe Inc.) and ProbeTec (SDA, Becton Dickinson, Co.) performance on these specimens. Here we present the specificity results.

Methods: Oropharyngeal and rectal swabs were obtained from MSM in an STD clinic and SDA and AC2 were performed on all specimens. NAAT positive specimens were retested by AC2, SDA and by APTIMA CT Assay (ACT), or APTIMA GC Assay (AGC) which target rRNA sequences different from AC2.

Results: We tested 1110 MSM. AC2 had more positive results than SDA for both organisms at both sites. The number of positive results, and the percentage confirmed are rectal CT specimens was larger allowing more confidence in the reliability of the confirmation data. Using a combination of all 3 tests confirmed >90% of positive samples, resulting in high specificities (>99.6%) for both AC2 and SDA.

	SDA				AC2			
	CT		GC		CT		GC	
(N)	Phx (6)	Rec (43)	Phx (69)	Rec (70)	Phx (11)	Rec (67)	Phx (81)	Rec (85)
Confirmed by (%):								
AC2 or SDA	100*	93	83	99	55	60	70	81
ACT or AGC	100	91	98**	99†	82	93	91	94
Repeat test	100	98	91	97	82	93	91	94
All 3	100	100	94	99	91	94	98	98

% confirmed, **only 57 tested by AGC, † 1 not tested by AGC.

Conclusion: In our MSM population, positive results obtained with AC2 and SDA are reliable, with PPVs >90%. The CT and GC NAAT positives were confirmed to a high degree. As expected, repeat testing, or using the ACT or AGC test, confirm more of the AC2 positive results than did the less sensitive SDA.

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Reverse transcritpase multiplex PCR for detection of viral agents in central nervous system infections

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Background: Viral infections of the central nervous system (CNS) may result in clinical syndromes like aseptic meningitis, encephalitis, and myelitis. These are often difficult to diagnose using conventional laboratory methods, such as viral culture and serology, because they are time consuming and unsatisfactory. Therefore rapid techniques should be employed to detect the etiologic agent. The study was aimed to standardize reverse transcriptase (RT) multiplex PCR aimed to detect viral etiology in CNS infections.

Methods: An RT multiplex PCR designed to detect, viral etiologies, enterovirus, herpes simplex and varicella zoster viruses in CNS infections has been standardized. Three sets of primers were been employed for their detection. Amplification of target sequences was qualitatively analyzed by looking for the presence or absence of amplicons on agarose gel. The RT multiplex PCR was standardized. Sensitivity of the PCR has been ascertained.

Results: Analysis of cerebrospinal fluid samples from pediatric patients is underway. *Conclusion:* The RT multiplex PCR standardized can be employed to detect CNS infections caused by herpes, varicella and entero viruses.

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