Evaluation of an accelerated micro-method for the detection, identification and antimicrobial susceptibility of urogenital mycoplasmas.

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Genital mycoplasmas, including Mycoplasma genitalium, M. hominis and Ureaplasma spp. are potentially pathogenic bacteria that colonize the genitourinary tract of sexually active individuals. Infections by these bacteria can lead to genital infections as well as undesirable squeals during pregnancy. The challenge of conventional methods to diagnose mycoplasmas forces researchers to investigate more sensitive, reliable and rapid alternatives. The new commercially available MYCO WELL D-ONE assay provides easy identification and enumeration of M. hominis and/or Ureaplasma spp. within 24 h to 48 h. The aim of this study was the validation of this commercial culture-based kit in comparison with the culture, in Cuban patients with urogenital infections. Fifty endocervical swab samples were collected from January to February of 2015 at the Tropical Medicine Institute “Pedro Kourí” in Havana City, from patients with urogenital infections, and analyzed at the same time using the conventional culture for Ureaplasma spp. and M. hominis, and the MYCO WELL-kit. Ureaplasma spp. were detected in 10% (5/50) and M. hominis was detected in 24% (12/50) of the patients. There was not coinfection in the study samples. The MYCO WELL D–ONE kit had 94.8% and 96.4% of sensitivity and specificity respectively against the bacteriological culture. In conclusion, the results suggest the feasibility of the new commercial kit for the detection and identification of M. hominis and Ureaplasma spp. in medical centers without access to culture and PCR-based tests.

Biography
Nadia Maria Rodriguez Preval, is a young researcher, Master in Sciences, Assistant professor and the Head of the National Reference Laboratory of Mycoplasmas, at Tropical Medicine Institute “Pedro Kourí”, Cuba. Her principal topic of investigation is the use of molecular methods for diagnostic and research of mycoplasmas in humans, and the application of conventional and advanced tests for identification of mycoplasmas. She is working in her Ph.D. thesis, related with the antimicrobial resistance of Cuban mycoplasmas isolates. She has participated in several national and international research projects and scientific events, and published about 24 papers in national and international journals.

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