hydrates in the 2 API kits, except for ribose, maltose, glucose, and sucrose. Discrepancies in results between the 2 test kits were seen with ribose in 1 isolate (M398) and maltose in 2 isolates (M124 and M397). One isolate (M380) did not hydrolyze hippurate but produced acid from trehalose and xylose. This isolate was also α-galactosidase positive, a result different from that of the type strain. All 4 isolates were α-glucosidase positive and 3 were alan-aryl-phenyl-alanyl-proline arylamidase positive. Some of the biochemical reactions for the 4 isolates, including all tests for delineating V. cambriense from other catalase-negative Actinomyces spp. (1), are summarized in the Table.

We report the isolation of V. cambriense from 4 patients with purulent skin and soft tissue infections. Our findings contribute to understanding of the clinical and pathogenic potential of this anaerobic bacterium. Gram-positive diphtheroid organisms from wound specimens are occasionally considered to be skin commensal organisms. Clinical microbiologists should be aware of this organism and the current inadequacy of commercial systems for its identification. We have shown that 16S rRNA gene sequencing is a useful alternative to gas-liquid chromatographic analyses of cell wall fatty acids or metabolic products for identification of anaerobic gram-positive bacilli.

Yiu-Wai Chu, Chi-Ho Wong, Man-Yu Chu, Cara P.F. Cheung, Terence K.M. Cheung, Cindy Tse, Wei-Kwang Luk, and Janice Y.C. Lo

Author affiliations: Centre for Health Protection, Hong Kong, People’s Republic of China (Y.-W. Chu, C.-H. Wong, M.-Y. Chu, C.P.F. Cheung, T.K.M. Cheung, J.Y.C. Lo); Kwong Wah Hospital, Hong Kong (C. Tse); and Tseung Kwan O Hospital, Hong Kong (W.-K. Luk)

DOI: 10.3201/eid1507.081291

References

Address for correspondence: Yiu-Wai Chu, Public Health Laboratory Centre, 382 Nam Cheong St, Kowloon, Hong Kong Special Administrative Region, People’s Republic of China; email: alf@dh.gov.hk

Outbreaks of Hemotrophic Mycoplasma Infections in China

To the Editor: Infections caused by hemotrophic mycoplasmas (formerly called erythrozoonoses) in animals and humans have been emerging in the People’s Republic of China in recent years. To date, 6 hemotrophic Mycoplasma spp. have been identified in rodents and mammals (1). M. suis from pigs, M. wenyonii from cattle, and M. ovis from sheep have been confirmed; the human pathogen, which is most frequently observed in China, has not been genetically identified (2). However, the zoonotic potential of the bacteria is evident because the disease is more prevalent in farmers and veterinary doctors, who have frequent close contact with domestic animals, than in other persons (2). Vertical transmission from mother to fetus has also been confirmed (2). In animals, especially in piglets, the disease is characterized by febrile acute anemia, jaundice, and eventual death resulting from concurrent infection with other microbes (3–6). Infected humans may be asymptomatic or have various clinical signs, including acute fever, anemia, and severe hemolytic jaundice, especially in infected neonates. Pregnant women and newborns were reported to be more vulnerable to the disease than others and to show more severe clinical signs after infection (2).

We conducted an epidemiologic investigation of hemotrophic mycoplasma infections in China by reviewing all reported cases and outbreaks for 1994–2007. Clinical cases for >6 animal species (including pigs, cows, goats, horses, foxes, chickens, and humans) were reported during the period (Table). The number of reported cases varied from year to year. Human infections were confirmed by clinical and laboratory methods (2). We reinvestigated blood samples of >600 pigs with previous diagnoses of mycoplasma infection accompanied by clinical signs of fever and jaundice. Slides were made and stained in Giemsa-staining solution. We used light microscopy to look for the presence of M. suis on the erythrocyte surface. We also used fluorescence microscopy to look for the microbes by mixing a drop of infected blood with acridine orange solution (0.1 mg/mL). The microbes bound to red blood cells were examined with a confocal microscope. Positive cases were further confirmed by PCR using primers of the small subunit RNA gene sequences. All samples were PCR positive, but PCR sensitivity is higher than sensitivity of acridine orange staining, which is higher than sensitivity of Giemsa staining.

Hemotrophic mycoplasma infection is still a neglected zoonotic disease, which poses a threat to public health and the animal industry, especially in China (2,7). The prevalence of the dis-
ease in domestic animals (e.g., pigs) and humans has reached an alarming level (Table). Human infection rates in certain areas in China have been high; for example, in Inner Mongolia, samples collected from 1,529 randomly selected persons during 1994–1996 showed that 35.3% of the local population, 57.0% of local pregnant women, and 100% of newborns of infected mothers were positive for hemotrophic mycoplasma infection (2). Infections in animals in China have been recognized since 1995, and the number of cases has been increasing rapidly. For example, >600,000 pigs infected with *M. suis* were reported in 2003 (Table). These infections have had a large economic impact on regions where the infection is endemic (8). Infections in other animals, including cows, sheep, and foxes, were also common, indicating a high prevalence of the bacteria in China. However, because of the lack of in vitro cultivation systems that assist in characterizing pathogens, progress in species identification and molecular characterization of these pathogens has been slow. Thus far, names of hemotrophic mycoplasma species have been based on the hosts from which they were identified. Due to the zoonotic nature of these pathogens, more in-depth studies on these microorganisms are needed.

This work was supported by the Young Distinguished Scholar Grant from the National Natural and Scientific Committee, People’s Republic of China (grant no. 30625029).

Zhe Hu,¹ Jigang Yin,¹ Kefei Shen, Wei Kang, and Qijun Chen

Author affiliations: Jilin University, Changchun, People’s Republic of China (Z. Hu, J. Yin, K. Shen, W. Kang, Q. Chen); and Swedish Institute for Infectious Disease Control and Karolinska Institutet, Stockholm, Sweden (Q. Chen)

DOI: 10.3201/eid1507.090174

References


Address for correspondence: Qijun Chen, Swedish Institute for Infectious Disease Control and Karolinska Institutet, Nobels väg 16, Stockholm 171 81, Sweden; email: qijun.chen@smi.se

Sensitivity of Andes Hantavirus to Antiviral Effect of Human Saliva

To the Editor: Hantaviruses cause 2 severe and often fatal human diseases, hemorrhagic fever with renal syndrome (HFRS) in Eurasia and hantavirus cardiopulmonary syndrome (HCPS) in the Americas. Rodents are the natural hosts for hantaviruses that cause HFRS and HCPS, and humans are usually infected by aerosolized virus-contaminated rodent excreta (*I*, *J*). Except for Andes virus (ANDV), human-to-human transmission of hantaviruses does not seem to occur. ANDV clearly is transmitted directly...