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Antimicrobial susceptibility pattern of *Helicobacter suis* strains

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Helicobacter suis is a very fastidious porcine gastric pathogen, which is also considered to be of zoonotic importance. *In vitro* antimicrobial susceptibility can not be determined using standard assays, as this agent only grows in a biphasic medium with an acidic pH. Therefore, a combined agar and broth dilution method was used to analyse the activity of nine antimicrobial agents against nine *H. suis* isolates. After 48h microaerobic incubation, minimal inhibitory concentrations (MICs) were determined by software-assisted calculation of bacterial growth. Only for enrofloxacin a bimodal distribution of MICs was demonstrated, indicating acquired resistance in one strain, which showed an AGT → AGG (Ser → Arg) substitution at codon 99 of *gyrA*. In conclusion, the assay developed here is suitable for determination of the antimicrobial susceptibility of *H. suis* isolates, although activity of acid sensitive antimicrobial agents may be higher than predicted from MIC endpoints.