MEDICINES

Use of glycopeptides in veterinary medicine

We refer to the article 'Pharmacokinetics and efficacy of teicoplanin against intramammary infections in sheep' by Naccari and others (2009). WHO has classified antimicrobials into classes of importance, according to defined criteria (FAO/OIE/WHO 2008, Collignon and others 2009). Critically important antimicrobials are those that meet two criteria: (1) the agent or class is the sole therapy or one of few alternatives to treat serious human disease; and (2) the antimicrobial agent or class is used to treat diseases caused by organisms that may be transmitted via non-human sources or diseases caused by organisms that may acquire resistance genes from non-human sources.

Teicoplanin is a glycopeptide antibiotic, that is, it belongs to the same group as vancomycin, which is classified as critically important.

Glycopeptides are among few alternatives for the treatment of human nosocomial infections caused by, for example, multiresistant *Enterococcus faecium* and meticillin-resistant *Staphylococcus aureus*. Before 1997, the glycopeptide avoparcin was used for growth promotion in the EU; a strong association between the use of avoparcin and vancomycin-resistant *E faecium* in exposed animals has been demonstrated. No glycopeptides have been authorised for clinical use in animals.

Naccari and colleagues conclude that teicoplanin could be useful for the treatment of intramammary infections in sheep. While that may be true when seen from the individual herd perspective, public health aspects such as zoonotic transfer of resistance must also be considered. Given the seriousness of the problems with antimicrobial resistance in human hospitals, it is our opinion that glycopeptides should be reserved for the treatment of life-threatening infections in humans.

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