Alpha-2-Adrenoceptor agonists in Veterinary practice

Mogoa, E.G.M; Mbithi, Peter Mulwa F; Nguhiu, J.M; Kihurani, D
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Abstract

Since the first a)-sdrenoccptor agonist xylazinc (Rompuml) was synthesized in 1962 in Germany, and the subsequent development of others in this group. a-adrenoceptor agonists have been used for decades for their sedative, analgesic and muscle relaxant properties in laboratory. domestic and wild animal species. Although drugs in this group induce physioiogic alterations in many species whose magnitude depends on the dose, rate of administration, route of administration and, concomitantly administered drugs. they have proven to be safe adjunctive agents in augmenting central nervous system depression, analgesia find muscle relaxation in healthy patients. One of the mere significant advances in veterinary anaesthcsiology during [he last decade has been the utilization of antagonists for the reversal of injectable anaesthetic regimens. Most notable of these is the clinical application of u1-antngonists such as yohim¬bine, tolazoliue, idazcxan, and atipamczote for reversal of the sedative-ml1scle relaxant actions induced by xylaziuc and ether a2 -ndrenoccpror agonists. This advance has made the use of drugs in this group safer and they will continue to play an important role in thc evolution and development of reliable synergistic receptor-mediated analgesia and anaesthesia. This paper looks at the role 2-adrenoceptor agonists have played and continue to play in veterinary practice.