STELLINGEN

"Cardiac and carotid vascular effects of 5-hydroxytryptamine-related drugs in the pig"

by Carlos M. Villalón

1. The putative 5-HT₄ receptor is involved in the positive chronotropic and positive inotropic effects induced by 5-HT, tryptamine- and benzamide derivatives in the pig (this thesis) and in humans (Kaumann et al., Br. J. Pharmacol., 100, 879-885, 1990).

2. 5-HT₄-like receptors unrelated to 5-HT₁₆, 5-HT₃₉, 5-HT₁₇ or 5-HT₁₉ binding site subtypes mediate either the decrease in arteriovenous anastomotic blood flow induced by indorene in the pig (this thesis) or the contraction of the saphenous vein induced by sumatriptan in the dog (Humphrey et al., Br. J. Pharmacol., 94, 1123-1132, 1988).

3. The 5-HT₄-like receptors mediating constriction of arteriovenous anastomoses and dilatation of arterioles in the pig are pharmacologically different (this thesis).

4. Compounds with high affinity for certain 5-HT₄-like recognition sites in brain tissue membranes and without agonist action on peripheral 5-HT receptors do not necessarily have to behave as 5-HT receptor antagonists in pharmacological functional studies (this thesis).

5. Within the bounds of serotoninergic mechanisms, the antimigraine action of drugs seems to depend mainly upon agonist action at 5-HT₄-like receptors mediating craniovascular contraction (this thesis).

6. Dopaminergic and/or purinergic neurons do not seem to be physiologically active in the porcine arteriovenous anastomoses (this thesis).

7. The prediction from radioligand binding tests/in vitro functional models of drug effects in in vivo studies can often be invalid.

8. People who disagree with each other in published papers rarely do so in terms so explicit that they cannot be misunderstood.