

Cardiovascular Drugs and their Pharmacokinetics

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INTRODUCTION

The increase in life expectancy in industrialized societies has caused a large number of elderly people to suffer from cardiovascular diseases. Despite advances in device therapy and surgery, the main treatment for these diseases is still drug therapy. Hypertension affects two-thirds of the elderly and remains a potential risk factor for coronary artery disease, chronic heart failure, atrial fibrillation, and stroke in this age group. Many trials have shown that the use of antihypertensive drugs can reduce these adverse consequences.

β adrenergic agents

β Adrenergic agents are for cardiovascular carriers in important importance to increase cardiac production through β_1 receiving anisotropy and chronological effects to maintain adequate perfusion of organs, is commonly used. In vascular induction in particular of the angles of $4\beta_2$ involves bronchial dilation and uterine relaxation. Research is in progress with the potential benefits of β_2 antibodies in the decrease in intravascular pulmonary water in patients with acute respiratory distress syndrome (ARD).

Effect of 4β adrenergic agonists

β Adrenergic agents in clinical use are active in two or more adrenergic receptors (β_1 , β_2 , β_3 , α_1 and α_2). The effects of the β_1 heart (and much less, β_2) include a greater heart rate, increases the driving rate throughout the heart, as well as the increase of conventional pacemakers. All beta adrenergic agonists can increase myocardial oxygen consumption and precipitate myocardial ischemia in sensitive patients (dobutamine is used to carry out myocardial stress tests). The beta agonist increases the incidence of cardiac arrests.

Adrenaline; Adrenaline is a natural catecholamine produced by the adrenal marrow. They are adrenergic agents α , β_1 and β_2 . In

low doses, β_2 -mediated vasodilation is dominant, but the highest dose (non-thermal) increased vasoconstrictions on the skin, mucous membrane, gastrointestinal tract, kidney and adrenergic agonists.

noradrenaline

noradrenaline, which occurs as a result of adrenergic acceptor agonism, is a neurotransmitter found in post-sympathetic neuronal fibers, and is an angular agent β_1 and α_1 mixed. Injection raises blood pressure and generally results in changes in changes and cardiac output. Because the amount of cardiac output is reduced and peripheral perfusion can be affected, it must be careful to avoid the use of noradrenaline under the blood conditions of hypotension.

Noradrenaline is generally used to maintain appropriate average blood pressure (map) after resuscitation of the capacitance and recovery of the appropriate cardiac output. Therefore, in the patient of cardiogenic shock, noradrenaline is generally used in combination with other β or phosphodiesterase agonists (PDE) 3 inhibitors.

A bulk septic shock patient has reported the noradrenalin infusion to improve the volume of urine and the glomerular filtration rate (GFR).

Dose: Injection IV: 0.01-1 $\mu\text{g}/\text{kg}/\text{min}$. Normal start dose: 0.02 to 0.05 $\mu\text{g}/\text{kg}/\text{min}$.

Adverse impact: potential organs dysfunction and necrosis, metabolic acidosis and arhalxyis vasoconstriction.

Isoprenaline

Isoprenaline is a synthetic agonist at beta receptors and does not have a significant α adrenergic effect. The injection results in an increase in heart rate and cardiac output, but the map decreased due to vascular diffusion mediated by β_2 . The main use is a

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chronotrotop for the temporary management of STUP. Due to the pulmonary vascular dilatory agents, it is sometimes used as an odorless for patients with pulmonary hypertension (pH).

CONCLUSION

The corners of the blood layer- β -layer β .beta.2-1 induce vasodilatation in coronary muscle, skeletal muscle and lung, sparyl, renal artery and artery. The angle α 2 causes vasoconstriction in the coronary artery and the artery and pulmonary artery, and the

vasoconstriction caused by the blood vessels of the skin and less. Metabolic effects of Beta.2-1-1-1 -Abrist has increased diabetes of the degradation of glycogen, liver and skeletal muscle, a greater capture of potassium to skeletal muscle and increased lipolysis.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interests