

Endothelium and coronary circulation El endotelio y la circulacion coronaria.

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In the last few years, so many different substances produced by the endothelium have been discovered that this structure is considered today a paracrine organ. Among these substances, there are at least three with marked vascular effects: prostacyclin (PGI-2) and the endothelium-derived relaxing factor (EDRF) are vasodilators, platelet stabilizers and anti-atherogenic. On the other hand, endothelin-1 (ET-1) is a potent vasoconstrictor and probably pro-atherogenic. There are many agents that stimulate the liberation of these substances by the endothelium and most of them stimulate simultaneously the production of the three substances. Even though it is not possible yet to define the exact participation of the endothelium in the normal regulation of coronary blood flow it is highly probably that a disfunction of this structure secondary to hypercholesterolemia, hypertension, atheromatosis, diabetes and smoking may decrease the coronary reserve, induce coronary spasm and facilitates the d