



Review

Gender and the endothelium

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Abstract:

The understanding of the basis of gender differences in vascular function is of critical importance to establish gender targeted interventions in cardiovascular medicine. In this review we concentrate on the central role of the endothelium in respect to gender differences in cardiovascular physiology and pathophysiology. The role of estrogen and its receptors is introduced not only as key players in gender-related differences in incidence of cardiovascular abnormalities but also in endothelium-dependent maintenance of vascular tone through the release of endothelium-derived vasodilators and vasoconstrictors. An improved understanding of the distinct processes that confer vascular maintenance in women and men will help to develop new treatment alternatives and improve the use of existing drugs.

Key words:

gender, cardiovascular, endothelium, estrogen, NO, EDHF, HRT
