



CARDIOVASCULAR PREVENTION AFTER THE MENOPAUSE: IS THERE A ROLE FOR HORMONE REPLACEMENT THERAPY?

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The large randomized trial on hormone replacement therapy after the menopause have been received by the media as an unexpected failure of hormones to benefit the cardiovascular system. However, when the wealth of knowledge accumulated on how estrogens and other steroids affect vascular cells is taken into consideration, many of the findings of these trials can be more properly interpreted. Estrogen signaling through estrogen receptors is nowadays appreciated as being much more complex than it was once thought. Acting through a rapidly growing number of signaling intermediates estrogen receptor are powerful regulators of vascular cells and tissues and play a relevant role in the modulation of vessels in physiological and pathological conditions. When considering how estrogen and other steroid receptors act on the cardiovascular system, these concepts lead to the suggestion that protective effects of these hormones on the vessels are likely, but may be limited to a specific “window” of exposure, that is early after the menopause, and possibly only to specific hormonal preparations and ways of administration. While the available clinical trials do not address these hypotheses, new studies are currently undergoing that may in the future shed light on this highly controversial clinical field.