

عنوان مقاله:

The Role of Mas Receptor and Bradykinin on Nitric Oxide Production Response to Angiotensin 1-Y in Ovariectomized Rats Treated with Estradiol

محل انتشار:

دوماهنامه پزشکی هرمزگان، دوره 22، شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

Introduction: The angiotensin 1-Y (Ang1-Y) Mas receptor (MasR) axis, bradykinin (BK) and female sex hormone are involved in releasing of vasodilatory biomarkers including Nitric Oxide (NO). We examined the role of MasR and BK on NO metabolite (nitrite) production response to Ang 1-Y infusion in ovariectomized rats treated with estradiol. **Methods:** A total of 48 female Wistar rats were divided into 2 main groups; ovariectomized treated with placebo (OVX) and ovariectomized treated with estradiol valerate (OVE) for period of two weeks. Then after anesthetization, the animals of each groups were divided into four subgroups that received MasR antagonist (AY79) or , BK, BK+AY79 or vehicle, and they were subjected to Ang1-Y infusion (0, 100, 300 and 1000 ng/kg/min). The level of nitrite (NO metabolite) was measured by Griess method. **Results:** The serum level of nitrite response to Ang 1-Y administration in OVE group was increased when compared with OVX group, however when MasR was blocked by AY79, the increased nitrite level was abolished. BK also increased the level of nitrite but co administration of BK and AY79 did not enhance the nitrite level in both OVE and OVX groups. **Conclusion:** Estradiol and Bk increase nitrite production in response to Ang 1-Y infusion .in condition of MasR presence

کلمات کلیدی:

Angiotensin 1-Y, Mas Receptor, Nitric Oxide, Bradykinin, Rat

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