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Editor's Desk

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Hypertension in women

Women in hypertension an entity is

under awareness, under-diagnosed undertreated

under-supported under-researched.

The biological process across a women's life span from young adulthood through menopause and beyond that impact blood pressure. Different types, Hypertension in adulthood, Hypertension in pregnancy

Hypertension in the postpartum period,Hypertension and Assistive reproductive technologies,Hypertension and menopause, Hypertension in elderly women.

Women potentially undergo several unique sex-specific changes which may impact their risk of developing Hypertension.

Hypertension in women -usually very late diagnosis, risks are more, smoking, alcohol, loss of sleep causes more risks compared to men. Many women do not follow advice on lifestyle modification; the Side effects of some antihypertensive drugs are more for women. They have more salt sensitivity.

Low HDL is more riskier for them .The effect of increased body mass index on BP is greater in women than in men.

Due to a lack of data on blood pressure, diagnostic criteria for pregnant women remain 140/90 and have not been updated.

Hypertension prevalence is lower in women from adolescence until menopause or 5th decade of life following which the prevalence of hypertension increases deeply in women.A recent study demonstrated that women actually have a steeper increase in BP as early as the third decade that continues through out the life course.

10 millimetre increase in systolic blood pressure, women experience a 25% increase in CVD risk while in men risk is only 15% higher.

The UK Enigma study, a long term follow-up study of 18 to 49year -old individuals ,men with hypertension had predominantly cardiac phenotype of hypertension with low or normal peripheral vascular resistance, while women had predominantly a vascular phenotype of hypertension with elevated peripheral resistance, argumentation index, and Aortic pulse wave velocity.

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In premenopausal women, the relatively higher level of estogen coupled with a lower level of testosterone results in lower BP compared to men of similar age.

Estrogen can be protective in women through its modulation of the Renin-Angiotensin-Aldosterone system. The second mechanism is by decreasing the pro hypertensive effects of endothelin 1 by decreasing its production as well as the expression of endothelin receptor types Aand B.

Estrogenic Compound 17beta estrodiol increases nitric oxide synthase and decreases angiotensin2 production leading to vasodilatation

Testosterone increases blood pressure by Vaso constriction and sodium retention

BP in women is lowest during luteal phase of menstrual cycle when oestrogen levels are at their peak.

Derangements in the hormonal milieu of reproductive- aged women can negate the expected sex -specific lower BP,as we see in the example of PCOS.

Despite the beneficial effects of endogenous oestrogen on blood pressure the chronic use of oral combined hormonal contraceptives is associated with BP elevation.

We tend to focus more on cervical cancer and breast cancer when the cardiac problem for women is much more. Hypertension is one of the biggest risk factors.

Every physician should focus on women's health and use opportunities for screening for example when a woman comes with her husband for husband's health

checkup ,we must also check the woman for cardiac ailment and hypertension also.

I tell women to be bold. Be bold in taking care of your heart health. Know your risk. Get heart Checked.

Dr. Nanette Wenger
Cardiologist

Comminutes, countries and ultimately the world are only as strong as the health of their women.

Dr. A. Muruganathan
Chief Editorial