

Treatment Strategy toward Primary Prevention of Hypertension

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Because the radical treatment has not yet been established in hypertension, the antihypertensive treatment must be usually continued throughout the life. However, recent studies have demonstrated that if the antihypertensive drug is administered before the onset or at the early stage of hypertension, the occurrence of hypertension is prevented afterwards without any medications. For example, in hereditary hypertensive rats, a short term treatment with angiotensin converting enzyme inhibitor at the prehypertensive stage can attenuate the increase in blood pressure during the rest of life. The hypertensive organ damage is also prevented concomitantly with the inhibited elevation of blood pressure in hypertensive animals. Moreover, it has been apparent that angiotensin II receptor antagonist can prevent the later onset of hypertension in human prehypertensive patients. In addition, mother's environment and eating habits during a gestational period can significantly affect the blood pressure in the offspring. Hypertension is brought about in adulthood more often in low birth weight child compared with normal birth weight child. The mother's consumptions of meat or fish can influence the offspring's blood pressure after birth. Therefore, the pharmacological intervention at the prehypertensive stage or improvement in pregnant woman's environment will be highlighted as the useful tools for primary prevention of hypertension in the near future.