

BULLETIN OF THE IRAQI HYPERTENSION SOCIETY

January 2019

Issue Number 6

THE VISION & MISSION



The Iraqi Hypertension society looks forward toward the control and possible elimination of high blood pressure in the Iraqi community through updating knowledge , increasing awareness , and promoting research. This is in alignment with the goals of the International Society of Hypertension.

The overall mission of the Iraqi Hypertension Society is to improve medical knowledge about hypertension at different levels of medical services. Also to increase the awareness among population and the policy makers about the deal with

hypertension as a public issue that is badly affecting health care plans if not targeted in a proper way.

The Iraqi Hypertension Society is committed to provide scientific support and expertise to all medical and social efforts that support it's mission and future goals.

The newly elected board thanks all colleagues in the previous board for their hard work in the last four years and will continue the same efforts to achieve the best care for hypertension in Iraq. This can't be achieved without teamwork spirit, openness, and integrity.

Editor In Chief:

Dr. Ghazi F. Haji

Executive Editor:

Dr. Ala Sh. Ali

Editorial Board:

Dr. Faris Abdul-Kareem

Dr. Saeed Majeed

Dr. Nazar Nassir

Dr. Samir Majeed

Dr. Raghdaa D. Sadeq





Winter Hypertension

Dr. Ghazi F. Hajji

President of the Iraqi Hypertension Society

Seasonal influence on arterial blood pressure has been demonstrated by various studies based on single or repeated measurements among adults, the elderly, and children as well as healthy and hypertensive subjects. [1–5] In all of these studies, both systolic and diastolic mean blood pressures showing a seasonal peak during winter and trough in summer. This variation is likely to affect the prevalence of hypertension in different seasons because of the fact that increase in blood pressure in winter will shift the proportion of the subjects from normotensive to the hypertensive category. This variation linked with multiple risk factors, such as temperature, physical activity, air pollution, and ultraviolet radiation. Other potentially important seasonal risk factors such as seasonal variation in the serum level of cholesterol, noradrenalin, catecholamine, and vasopressin which tend to rise in the winter

Mechanisms that could explain the association between blood pressure and temperature remain undetermined. Activation of the sympathetic nervous system and secretion of catecholamine are increased in response to cold temperatures. This could result in an increase in blood pressure through increased heart rate and peripheral vascular resistance. [6] Endothelium-dependent mechanisms could also be involved in the relationship between temperature and vasodilatation, as suggested by a recent study. [7] On the other hand, some relatively recent studies have suggested that alterations in temperature might also influence vas-

cular function through an effect on endothelial nitric oxide synthase and the bioavailability of nitric oxide. In rats, Acute and short-term exposure of rats to elevated environmental or core body temperatures has been shown to increase endothelial nitric oxide synthase expression. Conversely, repeated cold exposure of rats (4°C for 4 hours per day for 1 week) led to the development of hypertension and impaired endothelial vasodilator function in isolated arterial tissue. [8] Cold exposure also produces other relevant changes in the endothelial phenotype, including activation of the pro-inflammatory transcription factor nuclear factor-κB. [9] Thus, experimental studies suggest that cold temperature may alter endothelial biology. In contrast, summer seems to be a lower risk period for hypertension. It has been suggested that warm ambient summer temperatures may contribute to reduced vascular resistance. The other explanation has been linked between serum vitamin D status and hypertension. [10] However, hypertension patients should always be well-prepared for cold weather, taking precautions to limit exposure to the cold.

References

1. Deshmukh A, Pant S, Kumar G, Murugiah K, Mehta J. Seasonal variation in hypertensive emergency hospitalization. *J Clin Hypertens (Greenwich)* 2012;14(4):269–70. [PubMed]
2. Sinha P, Taneja DK, Singh NP, Saha R. Seasonal variation in prevalence of hypertension: Implications for interpretation. *Indian J Public Health.* 2010;54(1):7–10. [PubMed]
3. Al-Tamer YY, Al-Hayali JM, Al-Ramadhan EA. Seasonality of hypertension. *J Clin Hypertens (Greenwich)* 2008;10(2):125–9. [PubMed]
4. Miquel A, Martínez MA, Vendrell JJ, Hidalgo Y, Nevado A, Puig JG, et al. Seasonal blood pressure changes in mild hypertension. *Med Clin (Barc)* 2001;117(10):372–4. [PubMed]
5. Sharma BK, Sagar S, Sood GK, Varma S, Kalra OP. Seasonal variations of arterial blood pressure in normotensive and essential hypertensives. *Indian Heart J.* 1990;42(1):66–72. [PubMed]
6. Hanna JM. Climate, altitude, and blood pressure. *Hum Biol.* 1999;71(4):553–582. [PubMed]
7. Widlansky ME, Vita JA, Keyes MJ, Larson MG, Hamburg NM, Levy D, et al. Relation of season and temperature to endothelium-dependent flow-mediated vasodilation in subjects without clinical evidence of cardiovascular disease (from the Framingham Heart Study) *Am J Cardiol.* 2007;100(3):518–523. [PMC free article] [PubMed]
8. Zhu Z, Zhu S, Zhu J, van der GM, Tepel M. Endothelial dysfunction in cold-induced hypertensive rats. *Am J Hypertens.* 2002;15:176–180. [PubMed]
9. Roberts JR, Rowe PA, Demaine AG. Activation of NF-κappaB and MAP kinase cascades by hypothermic stress in endothelial cells. *Cryobiology.* 2002;44:161–169. [PubMed]
10. Ullah MI, Uwaifo GI, Nicholas WC, Koch CA. Does vitamin d deficiency cause hypertension? Current evidence from clinical studies and potential mechanisms. *Int J Endocrinol.* 2010;2010:579640. [PMC free article] [PubMed]



Implementing Hypertension Guidelines

Dr. Ala Sh. Ali

Consultant Nephrologist and Transplant Physician

The global prevalence and difficult to control raised blood pressure, mandate the need to develop a well-meaning advice for clinicians treating hypertension and hence the hypertension management guidelines had been released and updated every now and then. Since the first JNC report in 1976, major organizations published and updated guidelines with some overlap between their recommendations.

The ACC/AHA 2017 guidelines was the last update in such series. It lowered the recommended treatment goal to below 130/80 mm Hg across patient groups and changed the classification of BP levels, with stage 1 hypertension starting at a systolic pressure of at least 130 mm Hg or a diastolic pressure of at least 80 mm Hg. This has been reflected on hypertension epidemiology resulted in the identification of more individuals with hypertension, more requiring anti-hypertensive therapy, and more requiring intensification of antihypertensive therapy.

Evidence reviews revealed that achieving such target for those at known increased cardiovascular disease risk results in substantial CVD event reduction and lives saved with minimum side effects. Given that benefits, especially fewer CVD events and fewer deaths in those at higher CVD risk, now clearly exceed potential harms, barriers to implementation should fall. It is the time to implement.

The process of implementation war-

rants programs that involve public, private and nongovernmental organizations. The current intention toward more public-private partnership will add a lot to the efforts of achieving blood pressure control at different levels of health care. The role of hypertension groups and societies is critical to provide the scientific support and certainly the updated evidence-based guidelines.

Implementation of evidence-based strategies, such as team-based care, is needed to continue to make progress on hypertension control. However, in some clinical settings that are characterized by high-risk patient populations with limited social and economic resources and low-resource primary care, evidence-based multiple component interventions are unable to achieve adequate blood pressure control, showing the need for developing more effective, context-specific strategies.

Thus the big question is whether such guidelines would be ignored in some areas around the world because of the difficult implementation. The ISH had come out in support of an ideal systolic BP treatment target of 130 mm Hg before the US guidelines were released, but the organization did not advocate for lowering the threshold for defining hypertension. There is no trial evidence to support such a move.

Accordingly, there should be a great emphasis on standardized BP measurement and use of out-of-office tech-

niques, the incorporation of risk assessment, and—because of the ongoing controversy about the guidelines—increased awareness of high blood pressure as an issue.

References:

1. Whelton PK, Williams B. The 2018 European Society of Cardiology/European Society of Hypertension and 2017 American College of Cardiology/American Heart Association Blood Pressure Guidelines: More Similar Than Different. *JAMA*. 2018;320(17):1749-50.
2. Yancy CW, Fonarow GC. The New Hypertension Guidelines: Compelling Population Benefit, Manageable Risk, and Time to Implement. *JAMA Cardiol*. 2018;3(7):581-2.
3. Fine LJ, Goff DC, Mensah GA. Blood Pressure Control-Much Has Been Achieved, Much Remains to Be Done. *JAMA Cardiol*. 2018;3(7):555-6.
4. Khera R, Lu Y, Lu J, Saxena A, Nasir K, Jiang L, et al. Impact of 2017 ACC/AHA guidelines on prevalence of hypertension and eligibility for antihypertensive treatment in United States and China: nationally representative cross sectional study. *BMJ*. 2018;362:k2357.



Ambulatory blood pressure monitoring and diabetes complications

Dr. Faris AK Khazaal

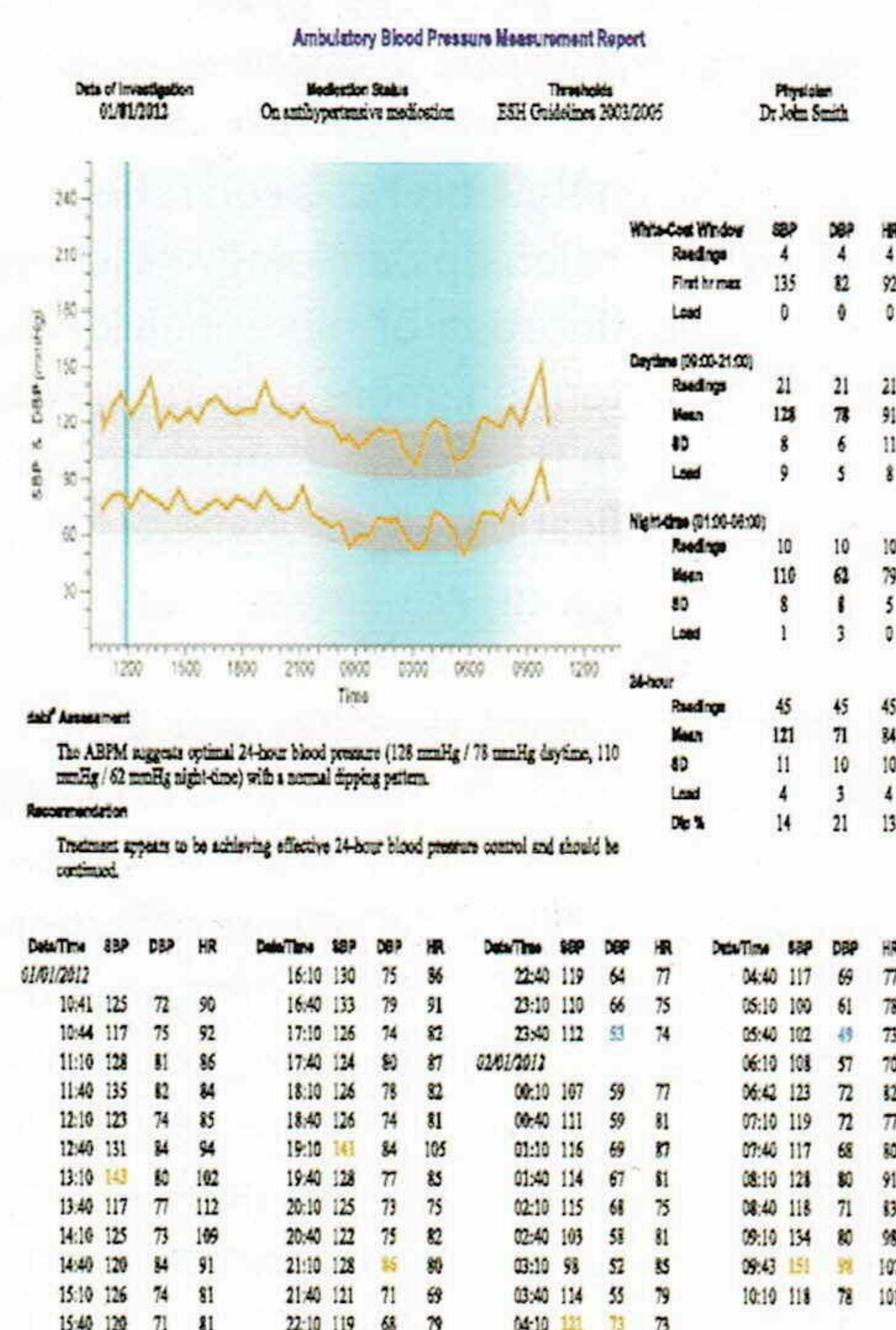
Clinical Professor and Diabetologist

Ambulatory blood pressure monitoring (ABPM) correlates more closely to organ damages than clinic blood pressure (BP). Diabetics were more likely to have daytime hypertension, masked hypertension and masked isolated nocturnal hypertension. Although nocturnal hypertension was more common among diabetics, this association was not present after adjustment for daytime systolic BP. The association between different BP phenotypes and diabetes complications including cardiovascular disease (CVD), nephropathy, retinopathy, and neuropathy assessed. Approximately 49% of T2DM patients had 24-hour HTN. The prevalence of daytime, nighttime, and clinic HTN were 36%, 96%, and 53%, respectively. Approximately 54% of participants had non-dipping nocturnal pattern and 29% were risers. Non-dipping nocturnal BP was associated with CVD, neuropathy, and retinopathy. Morning blood pressure surge (MBPS) was associated with neuropathy. Diabetic neuropathy was associated with all the components of MBPS and abnormal dipping status. The loss of nocturnal BP dipping but not MBPS is a risk factor for CVD and retinopathy in patients with T2DM. Those findings highlighted the importance of ambulatory BP monitoring and targeted antihypertensive therapy directed toward to restore normal circadian BP in patients with T2DM.



References

1. Ambulatory blood pressure monitoring and diabetes complications: Targeting morning blood pressure surge and nocturnal dipping. Najafi MT et. Al. Medicine (Baltimore). 2018 Sep;97(38):e12185
2. Ambulatory blood pressure monitoring phenotypes among individuals with and without diabetes taking antihypertensive medication: the Jackson Heart Study. Bromfield SG. et. al. *J Hum Hypertens*. 2016 Dec;30(12):731-736.





Herbs and Supplements for Hypertension

Pharmacist Mustafa Ghazi Al Saedi

More than One Third of people in Iraq suffer from systemic Hypertension which is responsible for many cardiovascular disease each year, making it the leading cause of death. While doctors write more and more prescriptions to treat the rising number of patients with high blood pressure, some people are turning to alternative forms of hypertension treatment.

A few herbs and supplements show promise as high blood pressure treatments, but it's important to use caution when choosing them. Some may have ingredients that aren't listed on the labels, or an alternative treatment for hypertension may interact with prescription or over-the-counter medication. To be on the safe side, always talk to your health care provider before starting any new.

The following herbs and supplements may be beneficial as alternative hypertension treatments:

Hawthorn. This northern European plant has been used as a heart-disease remedy for centuries. Medical research backs up hawthorn's heart-healthy reputation, and it is commonly used as an alternative treatment. Hawthorn seems to be an effective hypertension treatment due to its anti-inflammatory effect

Fish oil. Fish oil has been touted as a worthwhile dietary supplement because it's a good source of omega-3 fatty acids, which, among other things, has naturally occurring anti-inflammatory properties. This is why researchers are looking at fish oil as an

alternative treatment for hypertension. Fish oil also has the added benefit of driving down triglycerides, a type of fat in the body that can be dangerous at high levels.

Garlic. The compounds found in garlic help regulate the immune response involved in the inflammatory process and have been shown to lower lipid levels.

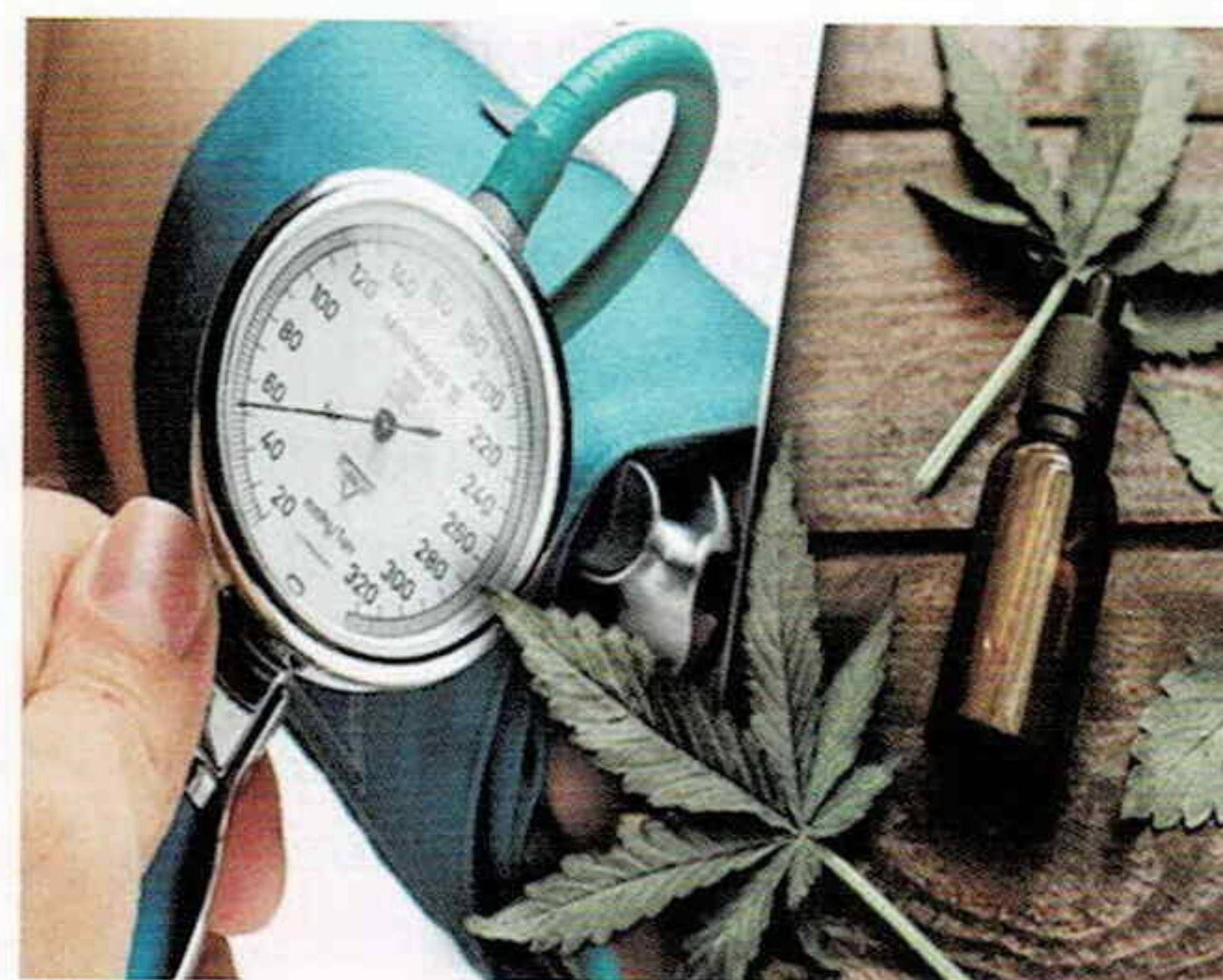
Magnesium. There is a fair amount of evidence showing diets high in magnesium may lower hypertension risk. Magnesium's role as an alternative treatment for hypertension is intimately related to calcium. Arterial smooth muscle requires calcium for contraction, but people with high blood pressure tend to accumulate calcium in these muscles — hence, the widespread use of calcium channel blocker medication.

Coenzyme Q10. The supplement coenzyme Q10 (Co-Q10) is also involved in the contraction of smooth muscle, specifically the efficiency of contraction. "Co-Q10 increases the activity of mitochondria, which is where energy is made, so it essentially gives more energy to the heart muscle," says Kalnins. However, its role as a hypertension treatment by decreasing blood pressure is unclear and needs further research.

Folic acid. Folic acid is sometimes given as an alternative treatment for hypertension because of its effects on the arterial walls. There is some evidence that accumulation of the amino acid

homocysteine in the blood can damage these walls. Folic acid, typically given in combination with vitamins B6 or B12, reduces homocysteine levels. A recent study showed that women who consumed at least 1,000 milligrams (mg) of folic acid per day had about half the risk of developing hypertension as those who consumed 200 mg or less per day.

Conclusion : Alternative medicine is not suitable as first line therapy in Hypertension but could be use as adjuvant to Pharmaceutical therapy for Hypertension is special selected cases under medical supervision





Can Echocardiography aid in the diagnosis of white-coat and masked hypertension ??

Dr. Samir M. Yousif

Consultant Physician, Echocardiography Specialist

Arterial hypertension (AH) has been well recognized as a common risk factor for cardiovascular disease. However, a great number of early hypertensive patients never experience any symptoms, and the awareness rate of AH remains low in general. Thus, early diagnosis of AH remains a challenge, particularly in a subclinical population. It is known that left ventricular (LV) hypertrophy with different remodeling patterns is one of the major cardiac manifestations of hypertensive heart disease, and echocardiographic LV hypertrophy could be detected in 20% to 40% of patients with AH. However, there are often no specific echocardiographic features for hypertensive patients at the early stage of disease. Previous echocardiographic studies have described asymmetric septal hypertrophy with a localized septal thickening at the basal-mid portion in patients with hypertrophic cardiomyopathy or aortic valve stenosis. Basal-septal hypertrophy may also occur in a subset of older normal subjects, with normal wall thickness (WT) elsewhere, and is considered to be an age-related anatomic variant. This morphologic echocardiographic sign is termed as septal bulge (SB), sigmoid septum, or discrete upper septal thickening or knuckle⁽¹⁾. septal bulge is defined as either a diastolic basal septal thickness 2 standard deviations above the normal mean (greater than 1.4cm), or 50% greater than the thickness of the septum at its midpoint.⁽²⁾

A large community-based population study reported that SB was documented frequently in elderly individuals with

higher systolic blood pressure (SBP). It was shown that the overall prevalence of SB was 1.5% and was markedly higher (18%) in the eighth decades of life.

In a study from University Hospital of Wurzburg, Germany, One hundred ten consecutive patients without a history and medication for arterial hypertension (AH) or other cardiac diseases were enrolled for echocardiography and two-dimensional speckle tracking-imaging, a cycle ergometer test (CET), and 24-hour ambulatory BP monitoring (ABPM). Patients were referred to as "septal bulge (SB)" or "no-SB" groups. In this SB group, 38 (79.2%) patients showed AH either by CET or ABPM. In contrast, in the no-SB group (n = 62), 59 (95.2%) patients had no positive test for AH by CET or ABPM. When AH was solely defined by resting BP, SB was a reasonable predictive sign for AH (sensitivity 73%, specificity 76%). However, when AH was confirmed by CET or ABPM the echocardiographic SB strongly predicted clinical AH (sensitivity 93%, specificity 86%).

The main findings of the study are as follows:

- (1) the echocardiographic SB sign strongly predicted AH with sensitivity of 93% and specificity of 86%.
- (2) the SB in patients with AH is a very early sign for hypertensive heart disease indicating remodeling of the LV with increasing regional wall thickness (WT) and reduced local myocardial function.
- (3) during clinical assessment, the diagnosis of AH is very unlikely in patients

with normal echocardiographic findings and without a SB sign.

- (4) in all patients with an accidental SB sign during echocardiography, a sophisticated diagnostic work up including resting BP measurement, ABPM, and CET for a potential AH should be initiated. The present study suggests that the presence of SB on echocardiography could be an easy but helpful indicator in asymptomatic AH patients and thus to initiate sophisticated diagnostics for AH. Absence of SB is suggestive of "white-coat" hypertension in patients with elevated resting BP. In patients with SB sign but normal resting BP, performing CET and ABPM might be valuable to detect masked hypertension⁽¹⁾.

Reference

1. Philipp Daniel Gaudron, Dan Liu, Friederike Scholz et al. The septal bulge—an early echocardiographic sign in hypertensive heart disease Journal of the American Society of Hypertension 10(1) (2016) 70–80
2. F Yalcin, F Yigit, T Erol et al. The septal bulge—an early echocardiographic sign in hypertensive heart disease Journal of Human Hypertension (2006) 20, 628–630.



Prevalence of hypertension in Iraq

Dr. Raghdah Dheyaa Sadeq

Head of training & research department
PHD / MOH

The burden of chronic Non-communicable disease (NCDs) is raising rapidly especially in low and middle income communities, in eastern Mediterranean and African regions and has now become a major challenge to global development.

With the changing life style and dietary habits in Iraq, it is expected to face a progressive rise in non-communicable diseases burden and related risk factors over the coming decades including hypertension which contribute to (50%) of total mortality and the main causes of morbidity, around one third dies before reaching the age of 70 years (STEP 2015).

The mean systolic blood pressure in Iraqi people was (128.5) and the mean diastolic blood pressure was (82.8) mm Hg, as expected, both increased with age.

The prevalence of raised blood pressure in Iraq (SBP ≥ 140 mmHg and/or DBP ≥ 90 mmHg) was (35.6%), being higher among men as compared to women (36.5% vs. 34.5% respectively) (STEP 2015).

Hypertension reported as the 5th cause of death in Iraq during 2016 (6.13%) of the total death, 3rd cause of death for female (6.2%) in 2017 & the 8th cause of death for male in 2017 also (4.6%). (Annual report MOH 2016, 2017).

Hypertension is considered as the main risk factor for CVD, the higher the BP, the greater is the chance of heart attack, heart failure, stroke, and kidney disease. For individuals (40–70) years of age, each increment of 20 mmHg in systolic BP (SBP) or 10 mmHg in diastolic BP (DBP) doubles the risk of CVD. Antihypertensive therapy has been associated with reductions in Stroke incidence (35–40 %), in myocardial infarction (20–25 %), & in heart failure more than (50 %).



What you should advise your patients about Hypertension?

Dr. Abdulkareem A. Al-Othman
Consultant Physician
Hawler Medical University

The followings are important advises that helps hypertensive patient to achieve proper control of blood pressure and to prevent or delay the complications of hypertension:

- 1-Commitment to taking the medicine continuously as directed by the specialist doctor.
- 2- Restrict salt intake with foods to less than 5gm per day (5gm salt equal one small teaspoon) and avoid eating salty foods.
- 3- Eating foods that are rich in potassium play a major role in lowering blood pressure in hypertensive patients i.e Bananas, oranges, lemon, cantaloupe, watermelon, dried fruit and raisin.
- 4-Eat a healthy balanced diet containing vegetables, fresh fruits low-fat dairy products, legumes, whole grains, fish, and unsaturated fatty acids (especially olive oil), and to have a low consumption of red meat and saturated fatty acids.
- 5- Alcohol should be avoided.
- 6- Regular consumption of sugar-sweetened soft drinks has been associated with overweight, diabetes mellitus and hyperlipidemia; all these factors will lead to increase cardiovascular diseases.
- 7- Coffee consumption has been shown to increase blood pressure while green or black tea consumption may help to lower blood pressure.
- 8- The studies advised healthy and hypertensive patients to participate in moderate intensity dynamic aerobic exercise like walking, jogging, cycling or swimming for at least 30 min per day, average 5-7 days per week will help to lower the blood pressure of hypertensive patients. Excessive weight gain has relation with hypertension and weight reduction will help to lower blood pressure.
- 9-Smoking cessation is the single most effective lifestyle measure for the prevention of cardiovascular disease, myocardial infarction and stroke.

References:

- 1-2017 ACC/AHA Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults.
- 2- 2018 ESC/ESH Guidelines for the Management of Arterial Hypertension.



Blood Pressure Measurement

Dr. Safauldeen A. Alhajim
Consultant physician
Basra Teaching Hospital

Automated office blood pressure (AOBP)

A mean SBP ≥ 135 mmHg or DBP ≥ 85 mmHg is the threshold for diagnosis. It is the preferred method in the office. Measurements should be taken in a sitting position with the back supported using a validated device known to be accurate. BP should be taken in both arms on at least one visit and if one arm has a consistently higher pressure, that arm should be used for BP measurement and interpretation. A cuff with an appropriate bladder size for the size of the arm should be chosen. Bladder width should be close to 40% of the arm circumference and length should cover 80-100% of the arm circumference. The arm should be bare, supported, and kept at heart level. The lower edge of the cuff should sit 3 cm above the elbow crease with the bladder centred over the brachial artery. The patient's legs should be uncrossed with feet flat on the floor. There should be no talking and the room should be quiet. The device should be set to take measures at 1-to 2-minute intervals. The first measurement should be taken to verify cuff position and validity of the measurement. The patient should be left alone after the first measurement while the device automatically takes subsequent readings. The average BP as displayed on the electronic device should be recorded, as well as the arm used and whether the patient was supine, sitting or standing.

Non-automated (manual) office blood pressure (NonAOBP)

Here, the threshold for diagnosis is a mean SBP ≥ 140 mmHg and/or DBP ≥ 90 mmHg.

Home Blood Pressure Monitoring (HBPM)

The threshold for diagnosis: SBP ≥ 135 mmHg or DBP ≥ 85 mmHg.

Ambulatory Blood Pressure Monitoring (ABPM):

The threshold for diagnosis: A mean 24-hour SBP ≥ 130 mmHg and/or DBP ≥ 80 mmHg, **OR** A mean day-time SBP ≥ 135 mmHg and/or DBP ≥ 85 mmHg, **OR** mean night time SBP ≥ 120 mmHg **and/or** DBP ≥ 70 mmHg.

The last two measurements are preferred for out of office methods for diagnosis. They can detect white coat hypertension (high office BP and normal HBPM/ABPM), and masked HT (normal office BP and high HBPM/ABPM).

Are you measuring correctly?

Evidence demonstrates that routine manual BP readings obtained in clinical practice are, on average, higher than when standardized measurement devices are used. Inaccuracies in BP measurement can have clinical consequences such as incorrect diagnosis, misclassification of cardiovascular risk, or improper dosage of antihypertensive medication. Measurement using electronic upper arm devices is preferred over auscultation. If electronic devices are unavailable, be sure to implement the recommended standardized technique for non-AOBP measurement.

Is arm size an issue?

In patients with large arm circumference, when standard upper arm measurement methods cannot be used, validated wrist devices (utilized with arm and wrist supported at heart level) may be used for blood pressure estimation. It is important to note that wrist devices are for estimation and not recommended for exact measurement.

References

- European Heart Journal (2018) 39, 3021–3104. 2018 ESC/ESH Guidelines for the management of arterial hypertension.

قياس ضغط الدم طوال اليوم يرصد الحالات المقنّعة

الأستاذ الدكتور فارس عبد الكريم خزعل

طبيب استشاري

أن استخدام وسيلة «المراقبة المحمولة لقياس ضغط الدم» كانت أفضل، وبشكل واضح، في التأكد من وجود إصابة حقيقية بمرض ارتفاع ضغط الدم لدى المرء، وأفضل في متابعة تحقيق الانضباط في مستويات ضغط الدم لديه طوال ساعات النهار والليل، وأيضاً أفضل في تكوين التوقعات المستقبلية لاحتمالات خطورة الوفيات خلال السنوات الخمس المقبلة فيما بين مجموعة مرضى ارتفاع ضغط الدم، وذلك مقارنة بما يُفيد به الاعتماد فقط على قراءات قياس ضغط الدم التي يتم إجراؤها في عيادة الطبيب.

كما أن استخدام وسيلة (المراقبة المحمولة لقياس ضغط الدم) على مدار الأربع وعشرين ساعة، أي في ساعات الاستيقاظ وفي ساعات النوم، يجعل الطبيب أكثر دراية ليس فقط بمجرد مقدار الارتفاع في ضغط الدم، بل أيضاً بأنماط التقلبات غير الطبيعية لمقدار قراءات قياس ضغط الدم طوال ساعات اليوم، مثل التفاوت الشديد في مقدار ضغط الدم فيما بين ساعات وساعات أخرى في اليوم، أو عدم حصول الانخفاض الطبيعي لضغط الدم أثناء النوم، وهي التقلبات ذات الصلة باحتمالات ارتفاع خطورة الإصابة بأمراض القلب والأوعية الدموية أو خطر الوفاة.

من خلال المراقبة المحمولة لقياس ضغط الدم يُمكن مراقبة مقدار ضغط الدم في فترات متعددة خلال النوم، وهو ما يُفيد في تحديد ما إذا كان ثمة انخفاض طبيعي لضغط الدم أثناء النوم مقارنة بفترات الاستيقاظ أو عدم حصول ذلك التغير الطبيعي، أي عدم حدوث انخفاض في ضغط الدم أثناء النوم بنسبة تفوق بـ 10% قياسات ضغط الدم في النهار. ومن المعلوم طبياً أن عدم حدوث ذلك الانخفاض الطبيعي أثناء النوم يُعد مؤشراً على تدني الحالة الصحية للمريض وارتفاع احتمالات الوفاة وارتفاع احتمالات حصول التلف في الأعضاء المستهدفة بالضرر من ارتفاع ضغط الدم كالقلب والكلى والعينين وغيرها.

المراقبة المحمولة لقياس ضغط الدم ترصد بدقة التغيرات الحادة في ضغط الدم، وهذا يُمكن على سبيل المثال من اكتشاف حالات (ارتفاع ضغط الدم المقنع Masked Hypertension) التي تتميز بأن قراءات قياس ضغط الدم للمريض فيها بعيادة الطبيب تكون طبيعية، ولكن قراءات قياسات ضغط الدم في الحياة اليومية تروي لنا قصة مختلفة تماماً،

برنامج الكشف المبكر عن ارتفاع الضغط وداء السكري في مراكز الرعاية الصحية الأولية

الدكتورة رغداء ضياء

يهدف برنامج الكشف المبكر والرعاية المتكاملة لارتفاع ضغط الدم والسكري في مراكز الرعاية الصحية الأولية الى خفض معدل انتشار ارتفاع ضغط الدم (25 %) بحلول عام 2025 عن معدله السابق في 2010. يتم شمول المراجعين لمراكز الرعاية الصحية الأولية من:

- الأشخاص البالغين من العمر 20 سنة فأكثر يتم شمولهم بالكشف المبكر لارتفاع ضغط الدم
- الأشخاص البالغين من العمر 40 سنة فأكثر يتم شمولهم بالكشف المبكر لارتفاع ضغط الدم والسكري
- الأشخاص الذين تم تشخيصهم مسبقاً بإحدى الحالتين (ارتفاع الضغط او السكري) لا يشملون بالكشف المبكر.
- الأشخاص المصابون بكلتا الحالتين (ارتفاع الضغط والسكري) لا يتم شمولهم بالخدمة لكن تتم متابعة حالتهم الصحية في المركز الصحي.

يتم الكشف المبكر لارتفاع ضغط الدم والسكري وحسب الفئات المذكورة اعلاه بزيارتين:

- الزيارة الاولى (الغربلة): حيث يتم تحويل المراجع من قاطع التذاكر الى المنسق لمعرفة ان كان المراجع مصابا بارتفاع ضغط الدم او السكري او امراض القلب او كان مدخنا ويؤشر باستمرار الكشف المبكر في الحقل الخاص بالمرض ، ثم يفحص ضغط الدم للمراجع (20 سنة فاكثراً) من قبل المنسق، فإذا كان ضغط الدم اقل من 140/90 تسجل نتيجة القراءة إشارة سالب (-) وتحفظ استمارة الكشف المبكر. اما اذا كان ضغط الدم مرتفعاً (الانقباضي يساوي أو أعلى من 140 أو الانبساطي يساوي أو أعلى من 90 أو كليهما) يؤشرفي نتيجة فحص الغربلة إشارة موجب (+) ويزود المراجع ببطاقة المراجعة ويرسل الى طبيب العائلة في المركز الصحي لاجراء اللازم كالمشورة وغيرها.
- في الزيارة الثانية (التشخيصية) يذهب المراجع الى المنسق مع بطاقة المراجعة، ويقوم المنسق باستخراج استمارة الكشف المبكر للمراجع ويتم تأكيد التشخيص بقياس ضغط الدم، فاذا كانت النتيجة موجبة يفتح له ملف ويملاً بالمعلومات وتتابع حالته من خلال الفحوصات والتحليل وتقديم المشورة والعلاج الدوائي.

ايضا يتم تقييم خطورة الإصابة بأمراض القلب والأوعية الدموية للأشخاص باعمار 40 سنة فأكثر وفق (check list) فاذا كانت نتيجة التقييم اقل من (30%) اي سالبة (-) فلاتوجد خطورة ، اما اذا كانت نتيجة التقييم يساوي او اكثر (30 ≤) يتم اجراء الفحص السريري للمريض واحالته إلى المستشفى.

يتم ادخال المعلومات الخاصة ببرنامج الكشف المبكر لارتفاع ضغط الدم والسكري وحزمة الخدمات الاساسية داخل المراكز الصحية الكترونياً عن طريق استخدام برنامج الكتروني ويتم تحليلها اوتوماتيكياً

17 MAY
World
Hypertension Day



هل يسبب ارتفاع ضغط الدم الصداع ؟

الدكتور سمير مجيد يوسف

اختصاص الطب الباطني

لقد نوقشت العلاقة بين الصداع وارتفاع ضغط الدم والتي تعتبر مصدر قلق كبير لمرضاينا لسنوات عديدة ، وللإجابة على سؤال حول ما إذا كان الصداع أكثر شيوعاً عندما يكون ضغط الدم أعلى ، فقد وجدت إحدى الدراسات ومن خلال مسح سكاني واحد أن الصداع الذي يحدث "كل بضعة أيام" أو إزعاج الأشخاص "قليلاً" قد تم الإبلاغ عنه من قبل 22.8% من الأشخاص الذين لديهم ضغط دموي الضغط > 140 مم زئبق ، 23.2% مع ضغط انقباضي من 140-159 ملم زئبق ، و 24.4% مع ضغط انقباضي < 160 مم زئبق ، وهذه النتائج كانت غير ذات دلالة احصائية.

لا شك أن العديد من المرضى يقرون على أنهم أكثر عرضة للإصابة بالصداع عندما يرتفع ضغط الدم لديهم ، لكن الدراسات الحديثة الأخرى تلقي بظلال من الشك على ذلك، ففي دراسة للعلاقة بين الصداع وضغط الدم أثناء مراقبة ضغط الدم المتتقلة (ABPM) لـ 150 مريضاً يعانون من ارتفاع ضغط الدم (وكثير منهم كانوا يتناولون الأدوية الخافضة للضغط) ، تم الإبلاغ عن نوبات الصداع في يوميات 30% من المرضى. وأظهرت الدراسة عدم وجود علاقة بين حدوث الصداع وما كان يحدث لضغط الدم ، وكان معظم المرضى خالين من الصداع عندما كان ضغط الدم عند أعلى مستوياته.

تم فحص قدرة المرضى على التنبؤ بضغط دمهم بشكل أكثر مباشرة في دراسة أخرى . ادعى بالضبط نصف من 102 من المصابين بارتفاع ضغط الدم أن بإمكانهم إدراك متى كان ضغط دمهم مرتفعاً. عندما تم اختبار ذلك ، تمكن عدد قليل منهم فقط أن يفعل ذلك. عندما يتم أخذ هذه الدراسات معا ، فمن الإنصاف القول بأن التغيرات قصيرة المدى في ضغط الدم لدى المرضى الذين يعانون من ارتفاع ضغط الدم الخفيف أو المعتدل ليس لها أي ارتباط مع التغيرات في الأعراض مثل الصداع. ومع ذلك ، فقد أظهرت بعض الدراسات ، وليس كلها ، أن الصداع هو أكثر شيوعاً في حالات فرط الضغط الشرياني أكثر من المعتاد. قد يكون لهذا الفئاض الطفيف من حالات الصداع في ارتفاع ضغط الدم بعض من التفسيرات، ففي معظم المرضى يكون الصداع غير محدد ، وقد يكون مرتبطاً بطيف من الأعراض ، بما في ذلك القلق ، والذي قد يكون سبباً أو نتيجة لارتفاع ضغط الدم. في هؤلاء المرضى ، نادراً ما يكون وجود الصداع ، في أي وقت ، نتيجة مباشرة لارتفاع ضغط الدم. وبما أن غالبية المرضى على دراية بتشخيصهم ، فمن المحتمل أن يكون الصداع في كثير من الحالات نتيجة تسمية هؤلاء هم مرضى ارتفاع ضغط الدم ، أو أن القلق والتوتر هما من العوامل التي تساهم في كل من ارتفاع ضغط الدم والأعراض على حد سواء. وفي هؤلاء المرضى ، قد يؤدي علاج ارتفاع ضغط الدم إلى تخفيف الصداع وكذلك الأعراض الأخرى ، ولكن لا يوجد سبب للاعتقاد بأن خفض ضغط الدم هو المسؤول المباشر عن هذا التحسن . اما الفئة القليلة الباقية من المرضى الذين توجد لديهم علاقة مباشرة بين ارتفاع ضغط الدم وحدوث الصداع ، فهؤلاء يكونون عادة من نوعين : الاول وهم نسبة قليلة من المرضى لديهم ضغط انبساطي عال جدا (≤ 120 ملم زئبق) ، والنوع الآخر هم المرضى ذوي الصداع الصباحي ، الذين قد يكون توقف التنفس أثناء النوم (sleep apnea) هو المشكلة الكامنة⁽¹⁾.

بقي ان نعلم ان الصداع الناتج من ارتفاع ضغط الدم في الغالب ما يكون على جانبي الرأس وهو صداع نابض ويزداد مع الجهد البدني و عند الاستيقاظ صباحاً⁽²⁾.