ARTERIAL HYPERTENSION IN PREGNANCY

Aysar Abdulkareem Mahmood[1], Inam Hamdoon Aboo[2], Yusra Ali Mohammed Ali Alabdulla [3]

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Abstract

Up to 10% of pregnancies can become complicated by hypertensive disorders of pregnancy, including pre-existing and gestational hypertension, preeclampsia, and eclampsia, which are a major cause of maternal and perinatal morbidity and mortality. There is agreement that severe hypertension and mild hypertension with organ failure should be treated, despite significant variances in recommendations.Reaching target pressures below 160/110 mm Hg, however, is still debatable. According to national and international standards, the review includes the most recent information on definition, categorization, therapy goals, and principles utilised in hypertensive diseases during pregnancy and after delivery.

Relationships and Activities: none.

AH - arterial hypertension, BP - blood pressure, GAG - gestational tional arterial hypertension, DBP — diastolic arterial pressure, CI — confidence interval, RR — relative risk, PE — preeclampsia, SBP — systolic blood pressure, CAH — chronic

Key words: hypertension, pregnancy, preeclampsia, treatment.

1 University of Mosul college of medicine High Diploma in Gynecology and Obstetric
2 University of Mosul College of medicine,High Diploma in Gynecology and Obstetric
3 University of Mosul College of medicine,High Diploma in Gynecology and Obstetric

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Introduction

Hypertension in pregnancy: controversial issues of national and international guidelines

Definition and classification

There is no universally accepted definition of arterial hypertension (AH) in pregnant women. According to the "National Working Groups on Education in the Area of High Arteri- Pressure During Pregnancy" recommendations from 2000, critical AH in pregnant women is defined as systolic blood pressure (BP) (SBP) levels of 140 mm Hg and/or diastolic blood pressure (DBP) 90 mm Hg.[1]. At least two dimensions must be used to establish the rise in blood pressure [2].

The following forms are recognised at this time Pregnancy-related hypertension includes gestational new hypertension (GAG), preeclampsia (PE), and PE that occurred in the context of chronic hypertension (CAH) [3–13].

Before pregnancy begins or before 20 weeks of gestation, CAH is defined as hypertension. Cree- A rise in blood pressure of 140/90 mm Hg before pregnancy or during the first 20 weeks of pregnancy that does not go away after childbirth and typically lasts for more than 42 days postpartum is referred to as CAH.GAG is defined as an independent rise in systolic blood pressure 140 mmHg and/or diastolic blood pressure (DBP) >90 mmHg at measurements taken at least twice with a 4-hour interval and manifesting after the 20th week. in pregnant women whose blood pressure was normal prior to delivery and who did not also have proteinuria

PE is a multisystem pathological syndrome that complicates pregnancy, labour, and the postpartum period. PE symptoms tend to become more pronounced after the 20th week of pregnancy. pregnancy SBP 140 mm Hg or DBP 90 mm Hg when measured at least twice every 4 hours in women whose blood pressure was normal before to becoming pregnant, together with any combination of the following: - proteinuria (less than 30 mg/mol of protein to the level of creatinine; less than 300 mg per day; or an indicator thorny strip of two or more);damage to the liver (increased levels of transaminases, such as alanine aminotransferase or aspartate aminotransferase>40 IU/l), which may be accompanied by pain in the right upper quadrant of the abdomen or the epigastria region; damage to the kidneys (creatinine level 90 mol/l); neurological complications (for example, due to mental status changes, blindness, stroke, clonus, severe headache Haematological complications (thrombocytopenia) - the number of platelets is 150000/mkl, disseminated induced intravascular coagulation, hemolysis; - uteroplacental dysfunction (for example, measures, intrauterine growth retardation, impaired blood flow in the umbilical artery

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When PE symptoms are present together with CAH, pregnant women with CAH are diagnosed.
Despite the fact that many academics agree that if precariousness lasts longer than 12 weeks, it can be classed as CAH, many researchers disagree. Experts from the Russian Society of Cardiology (RKO) and the European Society of Cardiology (ESC) recommend considering CAH hypertension and preserved ageing for six weeks after childbirth [14, 15]. the postpartum period, which is (42 days) after childbirth [5, 13].
The category of prenatal unclassifiable hypertension is also included in the ESC recommendations; this condition occurs paradise up to 20 weeks after conception but has not yet been categorised as of 42 days after delivery [5]. The "hypertension of the white bathrobe," "camouflagedAH," HELLP-syndrome (geologist, raised liver enzymes, low platelet count), and eclampsia are also highlighted in a number of suggestions. [4, 6-12].
In its Recommendations for 2014, the Canadian Society of Obstetricians and Gynaecologists also addresses CAG and GAG with current existence or absence of concurrent illnesses [6]. In addition to defining the kind of hypertension, it is crucial to determine the severity of the condition. The degree of hypertension in any of its manifestations (CHAG, GAG, PE) cannot be described by a grade system or a rise in blood pressure in expectant women. There are mild and severe forms of hypertension. [14]:
SBP levels between 140 and 159 mmHg and/or a DBP between 90 and 109 mmHg are considered moderate hypertension; SBP levels between 160 and 110 mmHg are severe hypertension. There are three levels of blood pressure that are considered safe according to certain recommendations: mild (140-149/90-99 mm Hg), moderate (150-159/100-109 mm Hg), and severe (160/110 mm Hg) [10]. Identification of the two levels of hypertension—moderate and severe—during pregnancy is crucial for assessing the forecast, selecting denia strategies, treatment options, and obstetrics [11, 12].
Except Furthermore, it is well known that even at blood pressure values lower than the average pulse, severe hypertension during pregnancy increases the risk of stroke[2, 10] and hypertensive encephalopathy[15].
The American College of Obstetricians and Gynaecologists (ACOG) recently released guidelines that acknowledge that the definition of hypertension in women is in conflict with the updated diagnostic criteria of the American College of Cardiology government (ACC) and the American Heart Association cation (AHA), who identified stage I AH at the level of blood pressure 130-139/80-89 mmHg and stage 2 at the level of blood pressure 140/90 mmHg [16], which necessitates [3, 12].
Despite the ACC/AHA's guidelines, the other societies' recommendations, which were published after 2017, did not alter the diagnostic standards.BP target There is no denying that the goal levels of BP values are below 160/110 mm Hg in compliance with worldwide norms. [3-10]. A cross-sectional analysis of 81 million hospital admissions revealed that hypertensive pregnancy illnesses more than five times enhance the risk of stroke [17]. Furthermore, regardless of the presence of PE, research from the Control of Hypertension in Pregnancy Study (CHIPS) demonstrated that severe hypertension is linked to higher rates of maternal mortality, pregnancy loss, premature birth, deniya small children, care for newborns day after 48 hours, and a number of other adverse obstetric outcomes [18].
It is still debatable whether moderate (no yellow) AG should be treated aggressively when numerous recommendations are taken into account [3, 5, 6, 8, 10, 19]. differences caused by a dearth of evidence that understates both the advantages and hazards that become apparent as blood pressure levels rise. Antihypertensive medications in the treatment of mild and moderate hypertension during pregnancy were examined in non-a long-standing Cochrane systematic review. 31 studies with 3485 women were included, comparing various medications with a placebo or no treatment, and 29 studies with 2774 women compared reducing antihypertensive medications between yourself.
The review's findings indicated that using antihypertensive medications cut the amount of women who go on to develop severe conditions for hypertension in half; however, the impact on reducing the frequency of obstetric complications and unfavourable pregnancy outcomes has not been shown. The small number and variability of groups included in the review, as well as various ologic techniques, all contribute to the explanation of the received findings [20].
Approximately 1,000 women with CAH or GAG (DBP 90-105 mmHg or 85-105 mmHg when taking antihypertensive drugs) were included in the CHIPS study (randomised controlled open multicenter inter-folk study), which was divided into two groups with "less than strict control" (target DBP 100 mmHg) and with "strict control" (target DBP 85 mm rt.st.). Secondary outcomes (severe issues for the mother in the first six weeks after delivery) and cumulative primary outcomes (loss of pregnancy or requirement for neonatal care within 48 hours of birth within the first 28 days) varied between the two groups. However, the "less strict control" group

developed severe hypertension more than the "hard control" group did. [21]. Though two sub-analyses were conducted as part of this study, experts are still debating its findings. According to studies [18, 22], preventing severe hypertension has advantages for both mother and child.

The CHAP study (Chronic Hypertension and Pregnancy), which includes pregnant women with CAH who are given or not monotherapy at a blood pressure level of 140-159/90-104 mm Hg, is currently larger and more widely conducted in the US. Additionally, in patients in the target group receiving antihypertensive medication, the final points are assessed once the target blood pressure is reached (140/90 mm Hg or 160/105 mm Hg). Adverse perinatal outcomes are included as primary endpoints for up to two weeks. after childbirth (foetus loss and severe, congenital PE, Preterm birth (35 weeks gestation), placental abruption, and the birth of a little infant (birth weight 10th percentile). 4,700 participants, about five times as many as in the CHIPS study, are anticipated to participate in the study. [23].

Despite the fact that study designs differ, the fact that over 75% of participants, including those in the CHIPS study, had CAH makes it likely that CHAP data will corroborate, contradict, or refute its findings. The CHAP study's findings will eventually support the advantages of using more aggressive strategies. The safety and advantages of blood pressure control during pregnancy at lower target blood pressure levels, as described in the AHA/ACC2017 recommendations for blood pressure control, are likely to require further study.treatment for very high blood pressure According to various recommendations, previously used medications to reduce blood pressure in expectant women include hydralazine, calcium channel blockers, methyldopa, urapidil, prazosin, isosorbide, and even magnesium sulphate. [24].

Intravenous formulations have seen an increase in use recently. Among the calcium channel blockers that we use include labetalol, hydralazine, short-acting nifedipine, and methyldopa (which is not typically used as a first-line research drug in most nations).According to two meta-analyses on the effects of hydralazine, which included 35 studies (3573 women) and 21 studies (893 women), pregnant women taking relaxing calcium channel blockers were less likely to experience an increase in blood pressure compared to those taking hydralazine [24, 25]. Additionally, it was noted that, when compared to other antihypertensive actives, the use of hydralazine is linked to an increase in unfavourable outcomes for both women (such as arterial hypotension, caesarean section, placental abruption, and oliguria) and the foetus (effect on heart rate (HR) and lower Apgar scores during1st minute). [25]).

There was only a statistically significant decrease in the incidence of maternal side effects when taking nifedipine, according to a meta-analysis of seven studies involving 363 women (relative risk (RR) 0.57; 95% confidence interval (CI) 0.35-0.94), while there were no statistically significant differences to control blood pressure, the frequency of maternal morbidity or mortality, as well as the effect on pregnancy outcomes. [26].

In a triple-blind, placebo-controlled research, magnesium was contrasted with sublingual nifedipine and intravenous nitroglycerin in the context of treating a small population (34 patients) with a diagnosis of severe PE. Research on demonstrated no significant changes in the foetus' heart rate despite therapy with vasodilators and a more prominent and rapid hypotensive response with less variability in the nitro group glycerol. There was also a set frequency of side effects in the foetus and mothers in both groups. [27].

As a result, all three agents (nifedipine, labetolol, and hydralazine) are still advised by international communities [3–7, 9, 10]. Methyldopa or nifedipine slow-acting foot release should be used for oral therapy in compliance with Iraqi clinical recommendations guidelines (2020). Because of PE's increased blood circulation, the usage of diuretics is not demonstrated. Magnesium sulphate intravenous injection is advised to treat seizures and prevent eclampsia [13].

It is considered unnecessary to treat severe hypertension during pregnancy if there are no obvious signs of organ malfunction (an "urgency"). With an initial decrease of 25% in the first hour's treatment and a more progressive decrease in the following watch, it is important to lower blood pressure below the level of 160/110 mm Hg. Due to inadequate perfusion, a more severe drop in blood pressure can endanger the foetus. On the other hand, severe hypertension accompanied by organ malfunction, such as pulmonary edoema or acute kidney damage, is referred to be a "emergency" and blood pressure in this situation should be lowered considerably more quickly.

Acute blood pressure drops should be avoided as much as possible since they can result in foetal or maternal lying because they go below critical perfusion thresholds. Increased At a rate of 10–20 mm Hg per 10–20 minutes, blood pressure should be brought down to a level of SBP 130–140 mm Hg / DBP 80–90 mmHg. ESC and RKO advise using nitroglycerin as an intra-trivenous infusion in PE complicated by pulmonary edoema [13, 28]. Within three to five minutes, the blood pressure should be reduced by about 30 mm Hg. After that, it should be slowed down until it reaches the desired level of 140/90 mmHg. [29].

Due of potential harm to the foetus and the risk of brain edoema in the mother, its application time shouldn't exceed four hours.It is advised to give

magnesium sulphate right away to PE patients who exhibit symptoms of organ failure (such as severe hypertension and proteinuria or hypertension and neurological problems) or eclampsia in order to prevent seizures. [3, 12].

This suggestion was made based on the results of the early homeized placebo-controlled study Magpie Trial, in which more than 10,000 women were given magnesium sulphate or a placebo when they had proteinuria of at least 30 mg/dl and a blood pressure more than 140/90 mm Hg. In patients with severe PE, the incidence of eclampsia was lower against the backdrop of the prescription of magnesium sulphate compared with patients treated with a calcium blocker called Nalov nimodipine [31], which demonstrated that magnesium sulphate reduced the risk of PE by 58% and reduced maternal mortality compared to placebo

Data on the use of magnesium sulphate for prevention of eclampsia in women with PE who do not exhibit symptoms of organ dysfunction are more debatable and demonstrate the need for treating a large patient population (100) in order to avoid one eclampsia case [3, 8].treatment for mild to moderate hypertension Methyldopa, labetalol, and nifedipine are the main first-line medications in situations of mild (non-severe) hypertension [3–10]. The absence of information on the advantages of a particular treatment to prevent unfavourable outcomes for the mother and the foetus is clearly the source of the divided variances in recommendations [3-7, 9-13].

According to recommendations from the United States, Canada, Europe, Australia, New Zealand, and Iraq [3-5, 9-13, 32, 33], methyldopa is advised as a first-line treatment to regulate blood pressure. Long-term studies on the drug's harm to children whose mothers used it while pregnant have been investigated since the 1960s [34]. The use of this substance was not associated with teratogenic consequences, although there were more spontaneous miscarriages and preterm births than usual, according to a prospective cohort study examining pregnancy outcomes in the first trimester of exposure [33].

According to a Cochrane review of the use of antihypertensive drugs for treatment of mild and moderate hypertension, the use of tildopa is inferior to calcium channel blockers and beta-blockers in relation to the prevention of severe AH (RR 0.70; 95% CI 0.56-0.88, 11 studies) ny, 638 women) and may be associated with a greater caesarean section rate (adjusted RR 0.84; 95% CI, 0.84-0.95, 13 studies, 1330 women) [20]. However, a subanalysis of the CHIPS study revealed that me-tildopa recipients had superior main and secondary outcomes than labetalol users, including newborn body weight, a decreased incidence of severe hypertension, PE, and premature birth [35].

Moreover, retro When compared to oral labetalol, methyldopa use was related with fewer negative outcomes in children, such as respiratory distress syndrome, convulsions, and sepsis syndrome [36]. Thus, unless stronger proof of the superiority of other antihypertensive medicines is acquired, methyldopa will continue to be the drug of choice. According to worldwide standards [3–7, 9], oral labetalol is the only medication in the first row to be recommended by British medical guidelines for mild to moderate hypertension during pregnancy [10]. Approximately 75% of women in a prospective observational study responded favourably to oral labetalol monotherapy[37]

The benefits of labetalol in terms of safety and efficacy have not been discovered in earlier randomised trials studies that directly compared it to methyl dopoi [38, 39]. However, labetalol has become more popular in the prevention of proteinuria, severe hypertension, and hospitalisations during pregnancy. It has also been independently linked to a lower number of cumulative adverse maternal and perinatal events [40]. Except Additionally, a study comparing ambulatory blood pressure indicators in pregnant women taking oral labetalol or slow-acting nifedipine release found that the group receiving labetalol had a higher frequency of DBP decreases below 80 mm Hg, which may be linked to a worsening of uteroplacental perfusion. [41].

In Canada, -blockers (acebutolol, metoprolol, pindolol, and propranolol) are regarded as the first-line pharmacological therapy for MI [4]. The first-line recommendation for non-severe hypertension during pregnancy in Australia/New Zealand is oxprenolol [10]. Regarding teratogenicity and the impact of -AB on the body weight of neonates, there is some debate. Atenolol is known to cause intrauterine development [41], and numerous groups advise against using it [3, 10–12]. The Cochrane review of 12 trials including 1346 women found that using oral beta-blockers during pregnancy to treat mild to moderate hypertension increased the chance of giving birth to young children (RR 1.36; 95% CI, 1.02-1.82). [42].

However, a recent retrospective cohort research analysis revealed that there was no association between the usage of -AD and foetal cardiac abnormalities after adjusted for age of mothers, body mass index, and comorbidities [43]. Except Additionally, a second international cohort research that included almost 15,000 women who used -AB throughout their first trimester of pregnancy found no evidence of a substantial rise in the risk of congenital abnormalities (RR 1.07; 95% CI 0.89-1.30) [44]. Contrary to these conclusions, a second cohort research including more than 10,000 women who had -AB in late pregnancy revealed that the risk of newborn bradycardia and hypoglycemia was increased. Except for newborn bradycardia in the -AB group (labetalol, metoprolol, and atenolol), kemia was greater (OP>1) [45].

In the majority of guides [3-7, 9, 10], calcium channel blockers, in especially none long-acting fedipine, are listed as first-line medications.A recent prospective cohort study revealed a low risk of teratogenicity when calcium channel blockers were taken during the first trimester [46]. They are also superior to methyldopa in terms of lowered blood pressure control, and they may be safer than weak lol in terms of meeting blood pressure goals[20]. Oral nifedipine and labetalol were examined in one randomised controlled clinical investigation of pregnant women with HAG. Along with a significant rise in hospital admissions to the intensive care unit and a more pronounced female decrease in central aortic pressure (by 7.4 mmHg) in the nifedipine group, peripheral blood pressure also decreased in both arms. [47].

There is relatively little information available regarding amlodipine, a novel calcium channel blocker that is a dihydropyridine. A small pilot study comparing amlodipine with furosemide for the treatment of CAH did not find any differences between them in terms of maternal or perinatal outcomes [49], according to a series of cases in which it was applied during the first trimester of pregnancy [48]. after-delivery hypertension Most women's blood pressure returns to normal within a few days of giving birth (between 29 and 57% in the first three days and between 50 and 85% in the first week); however, the timing of normalisation depends on the severity of the woman's physical symptoms [50]. In the first 5-7 days following labour, in conjunction with a natural rise in the amount of circulating [50].

Another is that, according to the study, 55% of the 22 patients with PE who were admitted to the emergency room during the first four weeks after giving birth were brand-new instances [51]. In addition to hypertensive problems during pregnancy, postpartum hypertension may be caused by iatrogenic factors, including the use of non-steroidal anti-inflammatory medicines, hypervolemia following regional anaesthesia, pain with insufficient analgesia, and anxiety [52, 53]. With the exception of propranolol and nifedipine, whose quantities in milk are comparable to their concentrations in the mother's plasma, all antihypertensive medications taken regularly by a nursing woman are excreted with the breast milk, but the majority of them are present there in extremely low concentrations [5, 28].

Antihypertensive medication should be administered for the treatment of severe postpartum hypertension before aiming for SBP values below 160 mm Hg and DBP below 110 mm Hg, with the potential use of urapidil and sodium nitroprusside [10, 54, 55].

However, the aforementioned preparations can only be used in our nation in line with the use directions after registering in the required manner. It is necessary to start therapy with preferred application fast-acting drugs (nifedipine, nitro- glycerin, sodium nitroprusside intravenously) in cases of severe hypertension or vascular crises (>150-160/100-110 mmHg for >15 min. or an isolated increase in DBP >120 mm Hg. with damage to target organs) [3, 56]. Any classes of antihypertensive medications can be administered, according to Iraqi clinical recommendations on hypertension in adults for the treatment of prenatal hypertension. However, it follows that you should stay away from methyldopa due to the possibility of getting postpartum depression. It is challenging to administer medical correction when lactation is present in our nation due to the fact that practically all medications have contraindications listed in the guidelines for medical usage. They are of clinical interest in this regard. RES non-pharmacological treatments for hypertension in certain patient groups, including those that take into mind the need for careful blood pressure control. Correction of ABP using transdermal torus electrostimulation "AVR-051" is a non-invasive physiotherapeutic action of pulsed electric current at low frequencies in the areas of the distal dermatomers, located on the left forearm, continued with a residence time of 5 minutes twice a day [57].

The aim of our study was to assess the impact non-invasive transcutaneous electrical stimulation on blood pressure indicators and its safety in the postpartum period.

Patients and Methods

Working hypothesis: the use of "ABP-051" in addition to addition to standard antihypertensive therapy PII improves blood pressure control within 14 days after childbirth.

Inclusion Criteria:

1) age from 18 to 44 years old,

2) the presence of hypertension - an increase in blood pressure ≥140/90 mm Hg. at least two measurements with an interval scrap for at least 4 hours,

3) consent to participate in the study.

Exclusion Criteria:

1) associated clinical conditions (in- sults, heart attacks, etc.),

2) acute febrile conditions,

3) severe violations of the functions of vital bodies,

4) damage to the skin at the site of application device.

Research algorithm

1. 1-3 days after delivery: - Choosing patients, getting their agreement with full knowledge of the situation, giving them information about the process, giving them the devices "ABP-051" and blood pressure self-monitoring diaries.

Rewrite this paragraph in simpler language: 2. For two times every day, within 14 days of getting the delivery, you need to use the device called "AVR-

051". In simple terms, this text is about keeping track of your blood pressure in the morning and evening using a diary. It also mentions using graphs to track your blood pressure and monitoring it through a phone. The longest period for the AVR-051 procedure is 14 days. We will check and analyze the results from the Tanium clinical trials.
The exposure group had 8 women with different types of high blood pressure. They received a treatment called transcutaneous electrical stimulation with a device called "AVR-051" in addition to taking their normal high blood pressure medication.
In the group we are comparing, there were 8 women who had high blood pressure. These women were similar in age and also had other health problems. They only took medication to lower their blood pressure and did not use the device called AVR-051.

Table 1 General characteristics of patients in both groups

	Group 1 (n=8)	Group 2 (n=8
Age, years	32.3±4.2	33.1±3.6
Primigravida, pers.	2	0
Miscarriage, pers.	2	5
PE in history, pers.	2	0
Anemia, pers.	3	1
HAG, pers.	3	1
GAG, pers.	4	4
PE, pers.	1	1
Timely delivery, pers.	7	8
Premature birth, pers.	1	0
Operative childbirth, pers.	1	1
Methyldopa intake, pers	7	4
Taking methyldopa in combination with nifedipine, pers.	1	4
Achievement of blood pressure <140/90 mm Hg, for which day	1	12.6±1.6
Complete withdrawal of an antihypertensive drug, pers	3.5±1.5	0
Obesity, pers	1	1

Abbreviations: BP, blood pressure; GAG, gestational arterial hypertension; PE, preeclampsia; CAH, chronic arterial hypertension. arterial hypertension, HR — heart rate, β-AB - β-blockers.

Table 2 Indicators of blood pressure and heart rate in puerperas in the compared groups

Index	Group 1 (impact)			
	1st day	7th day	14th day	the effect
SBP	141.5±8.2	129.3±4.4	122.3±4.8	-19.2
DBP	90.9±3.0	80.5±3.1	79.5±2.3	-10.4
HR	84.3±6.2	80.1±6.1	78.8±3.8	-5.5

Group 2 (comparison)			
1st day	7th day	14th day	the effect
143.6±7.6	141.2±5.8	133.3±5.4	-13.3
93±3.5	87.5±4.8	86.0±4.3	-7
86.3±3.5	80.0±5.7	79.3±6.5	-6.3

Abbreviations: DBP, diastolic blood pressure; SBP, systolic blood pressure; HR, heart rate.
In The first group had 7 cases where the pregnancies ended in the birth of healthy babies at the right time. In 1 case, there was a problem called PE and the baby had to be delivered early through a surgical procedure called a ke- sarevo section at around 36-37 weeks. Happy birthday to a regular child. Group 2 had 7 pregnancies that were completed on time. One of these pregnancies had an emergency caesarean section at 38 weeks due to complications with high blood pressure and detachment of the placenta. In this case, the placenta was positioned in the usual female location. During the switch on, the person continued taking medicine called methyldopa (also known as dopegyt) at a dose of 500 to 1000 mg. They also took nifedipine, a different medicine, at a dose of 30 to 60 mg along with the methyldopa.

The changes in blood pressure and heart rate in mothers after giving birth are shown in Table 2.

The copper Qing product Transcutaneous electrical stimulator, called "ABP-051", was tested on women who recently gave birth to treat different types of high blood pressure. The treatment lasted for 2 weeks. By studying a group of women who recently gave birth and have a type of yellow bacterial infection, we can understand the following findings: Achievement of the desired blood pressure levels (<140/90 mm Hg) was seen as early as the 3-5th day after childbirth, compared to the comparison group who only reached these levels by day 10-14 using the standard approach

Minimizing the amount of antihypertension drugs given to 5 out of 8 women after childbirth, and completely stopping the drugs after 14 days of observation. In the comparison group, reducing the dose of drugs that are often prescribed together did not work.

3) Making sure that the measurements for systolic and diastolic blood pressure show improvement after just one week. In the group that received treatment, there were no important changes in ki compared to the group that followed the traditional approach.

The medical device is safe for new mothers because it doesn't have any side effects when used in all situations. To determine how well this method of control is working. After childbirth, women's blood pressure needs to be monitored. It is recommended to conduct more research on this topic. The society for studying high blood pressure in pregnant women (ISSHP) has been researching different methods used by societies to deal with the issue of high blood pressure in pregnant women since 1998.

There are still differences in how blood pressure is measured, how proteinuria is determined, and the terms used to classify types of high blood pressure during pregnancy. This shows that thorough research is necessary before we can agree on how to diagnose and treat different types of high blood pressure in pregnant women.

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