

The existence of a biological marker that determines the favorable response or not to medical treatment, would save unnecessary pharmacotherapy periods. However, there is currently no such parameter.^{1,2} Therefore, surgical treatment is of choice when adequate control with pharmacotherapy is not achieved, as in our case.

As for the genetic study, mutations in the CASR gene of the parathyroid cells are related to alteration of calcium homeostasis. This receptor records calcium levels in the blood. Its mutation causes the insensibility of these cells to the variations of calcemia, generating an increase in PTH and glandular hyperplasia. This mutation is observed in hyperplasia, adenomas and NSHPT.

In our patient, DNA amplification was carried out by PCR of the CASR gene, detecting two changes in heterozygosis. The c.73C>T mutation had already been previously described, however, the second mutation found; c.1981T>C, is "novo" and probably pathogenic.

More than half of cases of hyperparathyroidism in children reported in the literature show family history; in our patient, the study of progenitors, revealed absence of mutations in the father and c.73C>T mutation in the mother. Many authors defend that family screening could be effective and efficient in the control of the disease.³

In conclusion, NSHPT should be considered in the differential diagnosis of newborns with hypercalcemia. The initial medical treatment will be vital for the patient, determining the need or not of subsequent surgical treatment. It is essential to establish the genetic diagnosis as well as a lifelong medical follow-up.

REFERENCES

1. Atay Z, Bereket A, Haliloglu B, Abali S, Ozdogan T, Altuncu E, et al. Novel homozygous inactivating mutation of the calcium-sensing receptor gene (CASR) in neonatal severe hyperparathyroidism-lack of effect of cinacalcet. *Bone*. 2014;64:102-7.
2. Gannon AW, Monk HM, Levine MA. Cinacalcet monotherapy in neonatal severe hyperparathyroidism: a case study and review. *J Clin Endocrinol Metab*. 2014;99:7-11.
3. Alagaratnam S, Kurzwinski TR. Aetiology, diagnosis and surgical treatment of primary hyperparathyroidism in children: new trends. *Horm Res Paediatr*. 2015;83:365-75.

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Comments on "The value of ABPM and subclinical target organ damage parameters in diagnosis of resistant hypertension" by Poveda Garcia MI, et al., NEFROLOGÍA journal, 13 March 2018[☆]

Comentario al artículo publicado «El valor de la MAPA y de los parámetros de lesión subclínica de órgano diana en el diagnóstico de hipertensión refractaria» por Poveda García MI, et al., revista de NEFROLOGÍA, 13 de marzo del 2018

Dear Editor,

We read with great interest the article "The value of ABPM and subclinical target organ damage parameters in diagnosis

of resistant hypertension",¹ and we believe that it is a very important contribution to the study of patients with difficult hypertension management and for the prevention of the secondary damage that this can lead to. However, we believe there are certain points they should take into account to improve their article. We have listed them below.

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In the article, a value of 140/90 mmHg or below is proposed as a target for blood pressure. However, in the new classification values according to the American College of Cardiology/American Heart Association (ACC/AHA), stage 1 hypertension is considered to be 130/80 mmHg or above, with the objective for the hypertensive patient being to reduce their pressure towards this value.²

In addition, it should be noted that ambulatory blood pressure monitoring (ABPM) serves as a diagnostic method for hypertension, but it cannot be confirmed as resistant hypertension (RH) purely on the strength of the results of said ambulatory measurements,³ as suggested in the results of their study where they state "of the total of 112 patients with probable diagnosis of RH referred from primary care, this diagnosis was confirmed by ABPM in only 61.6%".¹ RH is defined as blood pressure measured in clinic of $\geq 130/80$ mmHg, despite receiving three or more drugs at full doses, including a diuretic, or blood pressure <130 mmHg, but with the patient requiring four or more antihypertensive drugs, without positive response to these drugs.² This means that in addition to registering a resistant high pressure, there is more than one variable (inadequate treatment, lack of adherence to drugs) involved in defining the presence or otherwise of RH. We believe therefore that both the correct measurement of the pressure and these variables should be taken into account in establishing the diagnosis of RH. ABPM will allow us to rule out pseudo-resistance when obtaining ambulatory measurements³ and to exclude the white-coat effect,^{4,5} but it would only confirm the presence of hypertension, not RH.

To determine whether or not a patient is refractory to the treatment, it is necessary to monitor not only the ambulatory variation in their blood pressure, but also the administration, dose and taking of the medication, and to identify risk factors in the patient's lifestyle (such as obesity, sedentary lifestyle, excessive alcohol intake, excessive salt intake) which interfere with adequate blood pressure control.⁴ Although the article mentions that non-adherence to treatment and secondary causes of hypertension were excluded, they do not report how they made those exclusions. It should be noted that, to date, there is no gold standard to measure adherence to treatment and although various indirect methods are used such as pill count and self-reporting, this information could be biased, leading to adherence being overestimated.⁴ There are also direct methods, by measuring the drug or its metabolites in blood or urine, but they do not reflect the level of adherence with accuracy, so a combination of the two approaches is required for a more accurate estimation.³

In conclusion, it would be highly relevant to take into account other variables in the study to determine the true value of ABPM in the diagnosis of RH, due to the fact that,

as they wrote in the introduction to their article, poor medical management plays a key role. However, neither that nor the measurement of drug use were assessed in their study. Moreover, non-adherence to the treatment, which would also be additional information of great relevance, was not taken into account because it is difficult to measure, but it gives us a clue about where we need to make improvements in our routine medical care.

REFERENCES

1. Poveda García MI, del Pino MD, Rodríguez RA, Rodelo-Haad C, Carreño TP. El valor de la MAPA y de los parámetros de lesión subclínica de órgano diana en el diagnóstico de hipertensión refractaria. *Nefrología*. 2019;39:69-72.
2. Whelton PK, Carey RM, Aronow WS, Casey DE, Collins KJ, Himmelfarb CD, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol*. 2018;71:e127-248.
3. Gijón-Conde T, Gorostidi M, Camafort M, Abad-Cardiel M, Martín-Rioboó E, Morales-Olivas F, et al. Documento de la Sociedad Española de Hipertensión-Liga Española para la Lucha contra la Hipertensión Arterial (SEH-LELHA) sobre las guías ACC/AHA 2017 de hipertensión arterial. *Hipertens Riesgo Vasc*. 2018;35:119-29.
4. Carey RM, Calhoun DA, Bakris GL, Brook RD, Daugherty SL, Dennison-Himmelfarb CR, et al. Resistant hypertension: detection evaluation, and management: a scientific statement from the American Heart Association. *Hypertension*. 2018;72:e53-90.
5. Gijón-Conde T, Banegas J. Utilización de la monitorización ambulatoria de la presión arterial. *Hipertens Riesgo Vasc*. 2017;34:15-8.

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