

191 - SYSTEMIC ARTERIAL HYPERTENSION IN CHRONIC RENAL FAILURE PATIENTS SUBMITTED TO HEMODIALYSIS: STUDY IN A PRIVATE CLINIC IN NATAL / RN

SUÊNIA SILVA DE MESQUITA XAVIER
 GLAUCEA MACIEL DE FARIAS
 SAMIRA CELLY L. DE CARVALHO SANTOS
 IZAURA LUZIA SILVÉRIO FREIRE
 ANA ELZA OLIVEIRA DE MENDONÇA
 Universidade Federal do Rio Grande do Norte (UFRN), Natal/RN, Brasil
sueniamesquita@yahoo.com.br

INTRODUCTION

Systemic Arterial Hypertension (SAH) is a chronic degenerative disease of high prevalence worldwide and is currently associated with high rates of morbidity and mortality in the population (SIRIO et al., 2007).

The term hypertension or high blood pressure refers to the constant increase in pressure in the arteries that carry blood from the heart to the rest of the body. This excess force on the artery walls can damage them, restricting blood flow to vital organs like heart, kidney and brain (SMELTZER, BARE, 2009).

Life habits related to alcohol consumption, exercise, smoking and diet are considered risk factors and must be adequately addressed and monitored by health professionals, patients and families. Well, are essential to achieving and maintaining recommended levels of blood pressure (BRASIL, 2000).

Among cardiovascular diseases, hypertension is the most frequent and commonly associated with the development of complications such as stroke, myocardial infarction and chronic renal failure (BRASIL, 2000).

Hypertension and renal function are closely related to hypertension may be associated with both a cause and a consequence of a Chronic Kidney Disease (CKD). In malignant forms or accelerated hypertension may determine a severe renal injury, which may progress with great frequency and little time for a table of end stage renal failure (ESRD) (BORTOLOTTI; PRAXEDES, 2005).

In Brazil, unfortunately and promotion programs to prevent damages to health, could not cover all sections of the population, and in the case of chronic renal disease, confined almost exclusively to its most advanced stage, when the patient needs to therapy Renal Replacement (TRS) to survive (BATISTA et al., 2005).

Substitution therapy of renal function are met in 90% of cases by the Unified Health System (SUS), which is supplying approximately 10% of its budget to cover the costs of treatment of CKD. These costs could be reduced if prevention programs were diagnosed early and treated adequately and diabetic hypertensive population that seeks to basic health services (BATISTA et al., 2005).

Of this problem, this article aims to identify the prevalence of hypertension among patients on hemodialysis in a private practice in Natal / RN.

METHODOLOGY

The study is an exploratory descriptive and quantitative. According to Gil (2002), the exploratory and descriptive study aims to provide an overview of the type of approximate certain fact, consisting of the analysis and description of features.

The research includes the descriptive literature and / a documentary. In this study we chose a literature review, according to Barros and Lehfeld (2000) seeks to solve a problem or acquire knowledge from information derived from the material researched.

The quantitative approach allows a systematic collection of numerical information under conditions of too much control, analyzing this information through statistical (POLIT; BECK; HUNGLER, 2004).

Data were obtained from the statistical reports generated by the NEFRODATA a private practice in Natal / RN, under the Unified Health System (SUS) for the treatment of patients on Renal Replacement Therapy.

Research information relating to the occurrence of hypertension in 398 patients registered and undergoing hemodialysis (HD), as a factor associated with the development of chronic renal failure.

The data were analyzed using descriptive statistics and reported in tables and graphs.

RESULTS AND DISCUSSION

From records of 398 patients surveyed, 190 (48.0%) had hypertension as the underlying disease associated with the development of ESRD, as Chart 1 below

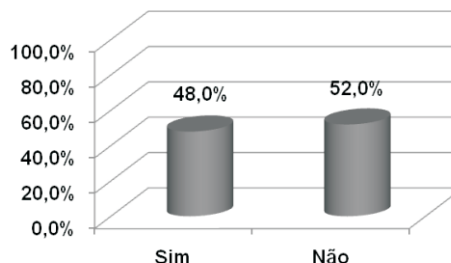


Figure 1. Distribution of systemic hypertension as the underlying disease associated with the development of ESRD.

Regardless of hypertension cause renal disease or vice versa, is now well established that hypertension is the main factor for the progression of renal disease and the progressive worsening of the IRC (KAPLAN, 2002).

According to the subsystem authorization procedure of high complexity of Renal Replacement Therapy (APAC-TRS), which monitors the end stage renal disease in Brazil between the years 2000 to 2006, hypertension was the main cause of ESRD, counting with 22.0% of new cases (MOURA et al., 2009).

Data from the study by Moura et al. (2009) suggest that hypertension and diabetes are diseases that mostly affected patients on RRT. Should be for them, so that prevention programs should be implemented with greater emphasis.

The main mechanism of hypertension in chronic renal failure is related to the progressive loss of renal capacity to excrete sodium, resulting in saline overload and volume. However, other mechanisms may be involved, such as increased production of vasoconstrictors such as angiotensin II, a decrease in vasodilators such as prostaglandins and changes in endothelial function with impaired synthesis of nitric oxide (KAPLAN, 2002; RITZ; ADAMCZAK; ZEIER, 2003).

The 48.0% (190) patients who had hypertension associated with ESRD, age, sex and time on hemodialysis were distributed according to Table 1.

Table 1. Distribution of systemic hypertension as the underlying disease associated with the development of ESRD according to sex, age and duration of hemodialysis.

VARIABLES	HAS associada a IRCT	
	N	%
Sex		
Female	80	42,1
Male	110	57,9
Age		
? 40 years	47	24,7
From 41 to 60 years	76	40,0
> 60 years	67	35,3
Duration of hemodialysis		
< 1 year	54	28,4
From 1 year to 5 years and 11 months	90	47,4
? 6 years	46	24,2
Total	190	100,0

According to Table 1, with respect to sex, men have a higher percentage (57.9%) of hypertension associated with ESRD. In the study by Moura et al. (2009) found similar data, in which the males represented 58.5% of cases of ESRD caused by hypertension.

Moreover, Oliveira, Romão and Zatz (2005) also found similar results, where the men were the majority in the occurrence of end stage renal failure caused by hypertension.

With regard to age, we see that people between 41 and 60 (40.0%) and elderly (35.3%) were the age groups that predominated in the research, concentrating 85.3% of cases of hypertension associated with ESRD.

The study by Moura et al. (2009) show a slight trend of increased incidence in people over 65 years of age. This phenomenon may be related to the aging of the population, increased use of renal replacement therapy by the elderly reduce mortality and other vascular disorders such as acute myocardial infarction and stroke.

For the duration of hemodialysis patients with ESRD associated with hypertension, 47.4% performed therapy in the range of 1 to 5 years and 11 months. In a study conducted by Mendonça (2006), about the time in HD, in 60.0% of patients is greater than two years, 29.4% is between six months and two years and 11.8% is less than six months.

CONCLUSION

From the survey of patients on renal dialysis at the clinic studied, it appears that almost half of patients (48%) had hypertension as the underlying disease associated with the development of ESRD. Of these, most were male (57.9%), aged between 41 and 60 (40.0%) and duration of hemodialysis from 1 year to 5 years and 11 months (47.4%).

After these findings, we can infer that hypertension is a chronic disease at high risk for the development of IRC and the population seems to be getting adequate treatment in primary health care to enable early detection and monitoring disease progression, making it susceptible to functional renal failure by inadequate control of blood pressure levels.

Public managers, health professionals and society in general need to wake up to the need to establish measures for the promotion, prevention and recovery of health by encouraging the development of healthy lifestyles and allocating more attention to educational and preventive actions that the healing thus minimizing the progress of chronic diseases in our country and its immeasurable consequences.

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AUTOR PRINCIPAL: SUÊNIA SILVA DE MESQUITA XAVIER, enfermeira assistencial da NEFRON Clínica Ltda, especialista em nefrologia. Endereço: Rua Aeroporto de Alcântara, nº405 – conj. Águas Claras, Parnamirin, RN. CEP 59.149-363. Tel. (84) 3643-3028, (84) 8876-7628. E-mail: sueniamesquita@yahoo.com.br

Co - autores:

GLAUCEAMACIEL DE FARIAS: glauceamaciel@gmail.com
 SAMIRA CELLY L. DE CARVALHO SANTOS: samiracelly@yahoo.com.br
 IZAURALUZIASILVÉRIO FREIRE: izaurafreire@hotmail.com
 ANA ELZA OLIVEIRA DE MENDONÇA: a.elza@uol.com.br

SYSTEMIC ARTERIAL HYPERTENSION IN CHRONIC RENAL FAILURE PATIENTS SUBMITTED TO HEMODIALYSIS: STUDY IN A PRIVATE CLINIC IN NATAL / RN

ABSTRACT

Systemic Arterial Hypertension (SAH) and renal function are closely related to hypertension may be associated with both a

cause and a consequence of chronic kidney disease. In malignant forms or accelerated hypertension may determine a severe renal injury, which may progress with great frequency and little time for a table of end stage renal failure (ESRD). This study was carried out to identify the prevalence of hypertension among patients on hemodialysis in a private practice in Natal / RN. The study is exploratory and descriptive quantitative approach to data obtained from statistical reports generated by the NEFRODATA in relation to the occurrence of hypertension as a factor in the development of CRF in 398 hemodialysis patients enrolled in the system in a nephrology clinic, at Natal/RN, under the Unified Health System (SUS) for the care of patients on Renal Replacement Therapy (SRT). Of the 398 patients, 190 (48%) had hypertension as the underlying disease associated with the development of ESRD, of these 57.9% were male, including age, 40.0% of patients were aged 41 to 60 years and 35.3% were between 61 and 80, with regard to treatment time, we saw that the majority 47.4% were on hemodialysis in the range from 1 year to 5 years and 11 months, followed by those who are less than 1 year of treatment corresponding to 24.2%. Thus we can conclude that hypertension is a chronic disease at high risk for the development of IRC, requiring the promotion, prevention and appropriate treatment of people in basic health units to enable early detection and monitoring disease progression thus preventing renal failure by inadequate control of blood pressure and its complications.

KEY WORDS: hypertension, chronic renal failure, hemodialysis, nursing.

HYPERTENSION ARTÉRIALE SYSTÉMIQUE AUX PATIENTS RÉNAUX CHRONIQUES SOUMIS À L'HEMODYALISE: ÉTUDE RÉALISÉE EN CLINIQUE PRIVÉE DE NATAL/RN

RÉSUMÉ

L'Hypertension Artériale Systémique (HAS) et la fonction rénale sont liées de façon intime, vu que la HAS peut être associée soit à la cause soit à la conséquence de la maladie rénale chronique. Dans les formes malignes ou accélérées, la HAS peut déterminer un bilan grave de lésion rénale qui peut évoluer avec grande fréquence et en peu de temps à un bilan d'Insuffisance Rénale Chronique Terminale (IRCT). Cette étude a été développée dans le but d'identifier la prévalence de HAS parmi les patients qui réalisent hémodialyse dans une clinique privée à Natal/RN. Cette étude est du type exploratoire descriptif et l'approche quantitative, avec des données obtenues des rapports statistiques originés par le logiciel NEFRODATA, par rapport à l'apparition d'hypertension comme facteur associé au développement d'IRC des 398 patients en hémodialyse enregistrés au système, dans une clinique de néphrologie de Natal/RN, partenaire du Système Unique de Santé (SUS) pour les soins des patients en Thérapie Rénale Substitutive (TRS). Des 398 patients, 190 (48%) ont présenté la HAS comme maladie de base associée au développement de l'IRCT, de ces 57,9% étaient du sexe masculin, selon l'âge 40,0% des patients, ils avaient entre 41 à 60 ans et 35,3% avaient 61 à 80 ans environ, à ce qui concerne le temps de traitement, on a identifié que la plupart 47,4% était dans le programme d'hémodialyse dans l'intervalle compris entre 1 à 5 ans et 11 mois, suivis de ceux qui sont à moins d'un an en traitement en correspondant à 24,2%. Ainsi, on peut conclure que la HAS est une maladie chronique de haut risque pour le développement d'IRC, en nécessitant d'actions de promotion, prévention et traitement adéquat de la population dans les unités basiques de santé pour viabiliser la détection précoce et contrôler l'avancement de la maladie, ce qui empêche ainsi le manque rénal par le contrôle inadéquat des niveaux de pression et ses complications.

MOTS-CLÉS: Hypertension, Insuffisance rénale chronique, Hémodialyse, Infirmerie.

HIPERTENSIÓN ARTERIAL SISTÉMICA EN PACIENTES RENALES CRÓNICOS SOMETIDOS A LA HEMODIÁLISIS: ESTUDIO REALIZADO EN CLÍNICA PRIVADA DE NATAL/RN

RESUMEN

La Hipertensión Arterial Sistémica (HAS) y la función renal están íntimamente relacionadas, pudiendo a HAS ser asociada tanto a causa como a la consecuencia de enfermedad renal crónica. En las formas malignas o aceleradas, a HAS puede determinar un cuadro grave de lesión renal, que puede evolucionar con grande frecuencia y en poco tiempo para un cuadro de Insuficiencia Renal Crónica Terminal (IRCT). Este estudio fue desarrollado con el objetivo de identificar la prevalencia de HAS entre pacientes que realizan hemodiálisis en una clínica privada en Natal/RN. El estudio es del tipo exploratorio descriptivo y abordaje cuantitativo, con datos obtenidos de los informes estadísticos generados por el programa NEFRODATA, con relación a la ocurrencia de hipertensión como factor asociado al desarrollo de IRC de los 398 pacientes en hemodiálisis registrados en el sistema, en una clínica de nefrología de Natal/RN, que tiene convenio con el Sistema Único de Salud (SUS) para el servicio de pacientes en Terapia Renal Sustitutiva (TRS). De los 398 pacientes, 190 (48%) presentaron HAS como enfermedad de base asociado al desarrollo de la IRCT, de éstos 57,9% eran del sexo masculino, en cuanto a la banda de edad, 40,0% de los pacientes tenían entre 41 a 60 años y 35,3% estaban en la banda de 61 a 80 años, en lo que se refiere al tiempo de tratamiento, se identificó que la mayoría 47,4% estaba en programa de hemodiálisis en el intervalo comprendido entre 1 a 5 años y 11 meses, seguidos de los que están a menos de 1 año en tratamiento correspondiendo a 24,2%. Así, se puede concluir que la HAS es una enfermedad crónica de alto riesgo para el desarrollo de IRC, necesitando acciones de promoción, prevención y tratamiento adecuado de la población en las unidades básicas de salud para tornar viable la detección precoz y controlar el avance de la enfermedad, impidiendo así la falencia renal por control inadecuado de los niveles de presión y sus complicaciones.

PALABRAS LLAVE: Hipertensión, Insuficiencia renal crónica, Hemodiálisis, Enfermería.

HIPERTENSÃO ARTERIAL SISTÊMICA EM PACIENTES RENAI CRÔNICOS SUBMETIDOS À HEMODIÁLISE: ESTUDO REALIZADO EM CLÍNICA PRIVADA DE NATAL/RN

RESUMO

A Hipertensão Arterial Sistêmica (HAS) e a função renal estão íntimamente relacionadas, podendo a HAS ser associada tanto a causa como a consequência de doença renal crônica. Nas formas malignas ou aceleradas, a HAS pode determinar um quadro grave de lesão renal, que pode evoluir com grande frequência e em pouco tempo para um quadro de Insuficiência Renal Crônica Terminal (IRCT). Este estudo foi desenvolvido com o objetivo de identificar a prevalência de HAS entre pacientes que realizam hemodiálise em uma clínica privada em Natal/RN. O estudo é do tipo exploratório descriptivo e abordagem quantitativa, com dados obtidos dos relatórios estatísticos gerados pelo programa NEFRODATA, em relação à ocorrência de hipertensão como fator associado ao desenvolvimento de IRC dos 398 pacientes em hemodiálise cadastrados no sistema, em uma clínica de nefrologia de Natal/RN, conveniada ao Sistema Único de Saúde (SUS) para o atendimento de pacientes em Terapia Renal Substitutiva (TRS). Dos 398 pacientes, 190 (48%) apresentaram HAS como doença de base associado ao desenvolvimento da IRCT, destes 57,9% eram do sexo masculino, quanto à faixa etária 40,0% dos pacientes tinham entre 41 a 60 anos e 35,3% estavam na faixa de 61 a 80 anos, no que se refere ao tempo de tratamento, vimos que a maioria 47,4% estavam em programa de hemodiálise no intervalo compreendido entre 1 ano a 5 anos e 11 meses, seguidos dos que estão a menos de 1 ano em tratamento correspondendo a 24,2%. Assim, pode-se concluir que a HAS é uma doença crônica de alto risco para o desenvolvimento de IRC, necessitando de ações de promoção, prevenção e tratamento adequado da população nas unidades básicas de saúde para viabilizar a detecção precoce e controlar o avanço da doença, impedindo assim a falência renal por controle inadequado dos níveis pressóricos e suas complicações.

PALAVRAS-CHAVE: hipertensão, insuficiência renal crônica, hemodiálise, enfermagem.

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