

EVENTS ASSOCIATED WITH THE DAILY LIFE OF ELDERLY UNDER HEMODIALYSIS¹

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ABSTRACT

This study aimed to analyzing the events associated with daily hemodialysis and the perceptions of nuisance in elderly CKD on hemodialysis. Cross-sectional analytical study of quantitative approach carried out with 35 elderly under hemodialysis in a northwestern Nephrological Unit of Rio Grande do Sul. Data collection took place during the months of May, June and July 2010, through a socio-demographic/clinical form, the *Kidney Disease and Quality of Life-Short Form* (KDQOL-SFTM). Data were analyzed using descriptive statistics and Spearman Correlation. Regarding the socio-demographic characteristics 74,3% were men, 65,7% aged 60 to 70 years old, 60% were married. In respect for the events associated with hemodialysis, cramps (60%) and weakness (57,1%) were the most frequently reported by the elderly. Regarding perceptions of the elderly about the problems that bother "extremely" during the last four weeks, with the highest percentages were weakness or dizziness, exhaustion and muscle pain. Statistically significant correlation was found ($p < 0,05$) muscle aches, chest pain, exhaustion and weakness/dizziness and interference of renal disease in their lives. In conclusion, these results allow us to understand specific aspects involved in nursing care and provide the largest professional knowledge to sustain their actions.

Keywords: Elderly. Hemodialysis. Nursing.

INTRODUCTION

Population aging is characterized by being natural, progressive and irreversible, related to reduced fertility and birth rates, increasing life expectancy, integration of new technologies in health care and scientific advances⁽¹⁾. These changes in the profile of the population, combined with the progress of policies in the area require from health professionals knowledge, skills and specific skills. Data from the Brazilian Institute of Geography and Statistics show that the Brazilian population is aging. A phenomenon found in the XII Census 2010 showed that the population aged 65 or older increased from 5,9% in 2000 to 7,4% in 2010⁽²⁾.

This phenomenon called "Demographic Window" is characterized by the number of

people aged considered potentially active, which is increasing and, inversely, the population of children and young people, in decrease. In this context, it is estimated that in 2050 the oldest of quota shall be an absolute majority and will represent 22,71% of the population⁽²⁾.

Parallel to the advancement of life expectancy and the increasing number of elderly people observed a higher incidence of health problems of low income, both acute and chronic nature, among them diabetes mellitus (DM) and Hypertension (HBP) that contribute to the increased prevalence of chronic kidney disease (CKD)⁽³⁾. In Brazil, the renal dysfunction has gradually increased. In 2000 there were 42.695 dialysis patients, 65.121 in 2005, 91.314 in 2011 and 100.397 in 2013⁽⁴⁾. Among hemodialysis patients in 2013, about 31,4% are over 65 years of age⁽⁴⁾.

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Chronic Kidney Disease (CKD) is characterized by structural abnormalities of the kidney that can lead to reduced kidney function diagnosed by glomerular filtration less than 60 ml/min/1.73m² for a period of three months or more⁽⁵⁾. Considered a worldwide public health problem, this progressive, debilitating and irreversible disease affects millions of people from all racial and ethnic groups, has a high incidence and high morbidity and mortality⁽⁵⁾. CKD is more common in older people because with aging is the progressive loss of renal physiological reserve, consequent to anatomical and functional changes that occur in the kidney⁽⁶⁾. In addition, the elderly have to be aggravating the disease social limitations that involve work, food and cultural habits and the family life, which can cause changes in mental status⁽⁷⁻⁸⁾.

Once installed, the DRC, the establishment of a treatment to replace kidney function is required, among which hemodialysis. The hemodialysis with the progress of CKD causes limitations and losses in mental, physical, functional, general welfare, social interaction and satisfaction state of the patients⁽⁸⁾. Still, the elderly have weaknesses related to aging, thus the limitations, especially the physical order may increase with advancing of age and appear multiple comorbidities, related to therapeutic modality⁽⁹⁾. In addition, hemodialysis is presented as an unexpected event which refers dependence on a relationship to a machine, a rigorous therapeutic scheme and a specialized team.

Although hemodialysis has become a safe procedure, able to improve the survival of CKD, dialysis units are local susceptible to adverse events, since they have risk factors, such as: invasive procedures, use of complex equipment, patients critical and potentially critical, high turnover of patients and administration of drugs such as heparin⁽¹⁰⁾. Also, patients may experience treatment-related complications and disease, among them the cardiovascular, infectious, pulmonary, metabolic, gastrointestinal and other⁽¹¹⁾.

An integrative review study shows that 30% of the hemodialysis can be complications, among which double lumen catheter infection, hypotension, hypertension, hypothermia,

muscle cramps, cardiac arrhythmias, headache, hypoxemia, itching, allergic reactions, thoracic and lumbar pain, nausea and vomiting, gas embolism, fever and chills⁽¹²⁾. In relation to nursing interventions, they imply direct and indirect guided by clinical trials developed by the nurse care. Thus, it is for the nursing staff individualized specialized care front of events that may occur in the intra and inter-dialytic⁽¹²⁾.

From this perspective expand knowledge about the old life context and the events associated with hemodialysis is essential because it allows the qualification of interdisciplinary care, improved relations and provides an individualized and personalized attention to each CRF. In this sense, we highlight the work of nurses, considered an active agent in the care process, in addition to being one of those responsible for planning and coordination of care⁽¹³⁾. It is considered that the nursing team in composition with other actors care can help the elderly in coping process and changes he lives. Extensive the chronic renal disease on hemodialysis care, points out the importance of outpatient and home care of patients because such a process with participation, guidance and clarifications continuous form⁽⁸⁾.

The nurse working in a nephrology unit must consider the importance of the instrumentalization of professionals within the team, being in direct contact with the elderly on hemodialysis and thus promote continuing education activities. It is important to observe the characteristics of each patient, at various stages of treatment, such as those involving mental, social and physical health, and to encourage the appropriate coping with the chronic disease and its treatment, with extensive attention to family.

Based on these considerations, the objective is to analyzing the events associated with everyday hemodialysis and the uncomfortable perceptions of elderly CKD under hemodialysis.

METHODOLOGY

This is a cross-sectional analytical research of a quantitative approach, carried out with 35 elderly CKD under hemodialysis, in a

Nephrological Unit of a hospital size IV in the Northwestern of Rio Grande do Sul.

The study included patients 60 or older, diagnosed with CKD who were on hemodialysis for at least 6 months and agreed to sign informed consent. Seniors who had difficulty in understanding the protocol were excluded.

Data collection occurred during the months of May, June and July 2010, through research protocol consists of: characterization Form sociodemographic and clinical, developed by the researchers, who looked beyond these data, comorbidities, and events associated with hemodialysis (cardiac arrhythmia, recurrent infections, weight gain, constipation, pain, hypertension, headache, itching, weight loss, low blood pressure, weakness and cramps) and the Kidney Disease and Quality of Life-Short Form (KDQOL-SFTM).

For this study, there were analyzed the items 12.1 and 14 of that instrument, because these two were related to the study object and contemplated the goal. Item 12.1 assesses the extent to which the "My kidney disease interferes too much with my life" statement is true or false to the patient, ie, evaluates the patient's perception about the interference of kidney disease in your life, with five options response on a Likert scale ("always true", "almost always true", "don't know", "almost always false" and "always false").

Item 14 of KDQOL-SFTM evaluates how the patient is bothered during the last four weeks, with the following problems: muscle pain, chest pain, cramps, itchy skin, dry skin, shortness of breath, weakness or dizziness, lack of appetite, exhaustion (very tired), numbness in the hands or feet, like vomiting or stomach upset and problems with its access road (fistula or catheter). Similarly, the response option consisted of a Likert scale with five points, "Do not bother me at all," "I was a little bothered," "bother me moderately", "very troubled" and "extremely bothered".

After collection, the data were entered into stored in Excel and analyzed using descriptive statistics, using the Statistical Package for Social Sciences (SPSS). The Spearman Correlation Coefficient was used to measure

the degree of correlation between two variables.

In conformity with the Guidelines and Regulatory Research Involving Human Subjects Standards (CNS 196/96), it was made available to the research participants and Informed Consent Form (ICF), which was signed in duplicate after the clarification about the nature of the research and authorizing voluntary participation.

This study is part of the inter-agency report "Study, risk factors and assessment of quality of life of chronic renal patients on hemodialysis in a nephrology unit in the northwest region of Rio Grande do Sul", approved by the Research Ethics Committee (CEP) the Federal University of Santa Maria (UFSM) under Opinion Embodied number 02780243000-09.

RESULTS AND DISCUSSION

At the time of data collection 102 patients underwent hemodialysis in the unit. Of these, 77 agreed to participate by signing the informed consent, and of these 35 were elderly, subjects of this study.

Regarding the sociodemographic characteristics of the elderly, 74,3% were men, 65,7% aged 60 to 70 years of age, 60% were married, had children 100% and 74,3% did not complete the elementary education. It was found that 91,4% were retired, and 54,3% lived with a partner. Similar results were found in a study of 223 patients aged ≥ 60 years in hemodialysis, in Belo Horizonte (MG), in which it was found that 56,5% were men, 55,2% aged 60 to 70, 59,2% were married, 91,9% had children, 89,3% lived with family members and 47,5% had one to four years (14).

Among these results, there is a predominance of men in dialysis units, before which infers the need to broaden the discussion on human health. The number of chronic renal male reinforces the importance of including human health in the discussion agenda on public policies as these patients become dependent on a machine just in the productive years⁽¹⁵⁾. In addition, it is noted that

the Brazilian culture itself does not consider important the presence of man in the spaces of health services, and activities that can contribute to health promotion⁽¹⁵⁾.

The fact of living with a partner or other family member is important because it is considered that the elderly need dialysate so continue a family caregiver, a key component in the care process. This caregiver should be prepared in addition to the comings and goings for hemodialysis three times a week, helping the elderly in activities of daily life, control the use of drugs, follow the diet as well as being an essential emotional support⁽⁷⁾. Therefore, the nurses as health educators, can develop activities, both with patients and with relatives, which offer a greater knowledge related to the disease, treatment and emotional control in order to develop strategies for problem solving⁽¹⁶⁾.

Regarding the clinical variables, 22,9% were on hemodialysis six months to two years, 22,9% for two to five years of age, 17,1% of five to eight years of age, 22,9% had hemodialysis eight to 11 years and incomplete, 14,2% had hemodialysis for 11 years or more. When evaluating the variable hemodialysis time it was observed that 54,2% of the elderly had hemodialysis for over five years, a result which shows that even with all the changes it brings, hemodialysis prolongs the life of the kidney, including improved quality of life in some dimensions. In this sense, such as the elderly experience odd way this reality, nursing has a primary role in relation to the identification and valuation of the particularities of each⁽¹⁶⁾.

Evaluating the perception of the elderly about the interference of kidney disease in their life, faced with the statement "My kidney disease interferes too much with my life", 31,4% mentioned that is "almost always true", 28,6% that is "always true", 28,6% that is "almost always false" and only 11,4% which is "always false". These results show how the subjectivity of each interferes with perceptions that have the disease and treatment, a peculiarity that deserves attention from the staff assisting these patients. Knowing these perceptions may represent a means by which

nurses can implement their actions individually and effectively not only based on their own ideas⁽¹⁶⁾.

In this respect, it is considered that the establishment of interpersonal relationships in the act of caring, can interfere significantly to the patient's well-being and thus on the ability to realize it, positively or negatively, their experience. To this end, the team has to create opportunities possibilities for the elderly identify weaknesses and potential related to coping with the disease and treatment, and develop strategies to promote their quality of life. By being in direct contact with the patient and family, the nurse is responsible for guiding about the disease, its implications and limitations, as well as report on the treatment strategy, technical aspects of hemodialysis and the possible problems that the patient may be experiencing⁽¹⁷⁾.

Sequentially, in Figure 1, shows the events associated with hemodialysis by respondents. It appears that that cramps and weakness (asthenia) were the most frequently reported events by the elderly, with respectively 60% and 57,1%. Still, it is observed that hypotension, weight loss and itching (pruritus) were reported by more than 30% of the subjects. However, the events with smaller percentages were constipation, weight gain, recurrent infections and cardiac arrhythmias. From these results, it is noted that the quality of life of these patients is affected by the severity of these events and clinical complications or parallel complications.

In a study that identified the main complications presented by CRF patients during hemodialysis sessions, the main reports through participants was hypotension (62,07%), followed by vomiting (44,83%) and dizziness (41,38%)⁽¹⁸⁾. Knowledge of these events experienced by CRF in this universe permeated by the specificity of the patient and the complexity of the treatment, it is extremely important to provide a holistic assistance to elderly people who have often fragile, insecure, due to new living situation imposed on them.

Table 1 shows the frequency of the perceptions of the elderly regarding the

problems that bothered during the last four weeks. As explained, the problems that bother "extremely" with highest percentages were weakness or dizziness, exhaustion and muscle pain. As for the problems that bother "moderately", presented the highest

percentages were cramps, itchy skin, loss of appetite and exhaustion. Detaches it is among the issues that do not bother "in any way", 85.7% reported problems with your process route (Fistula or Catheter).

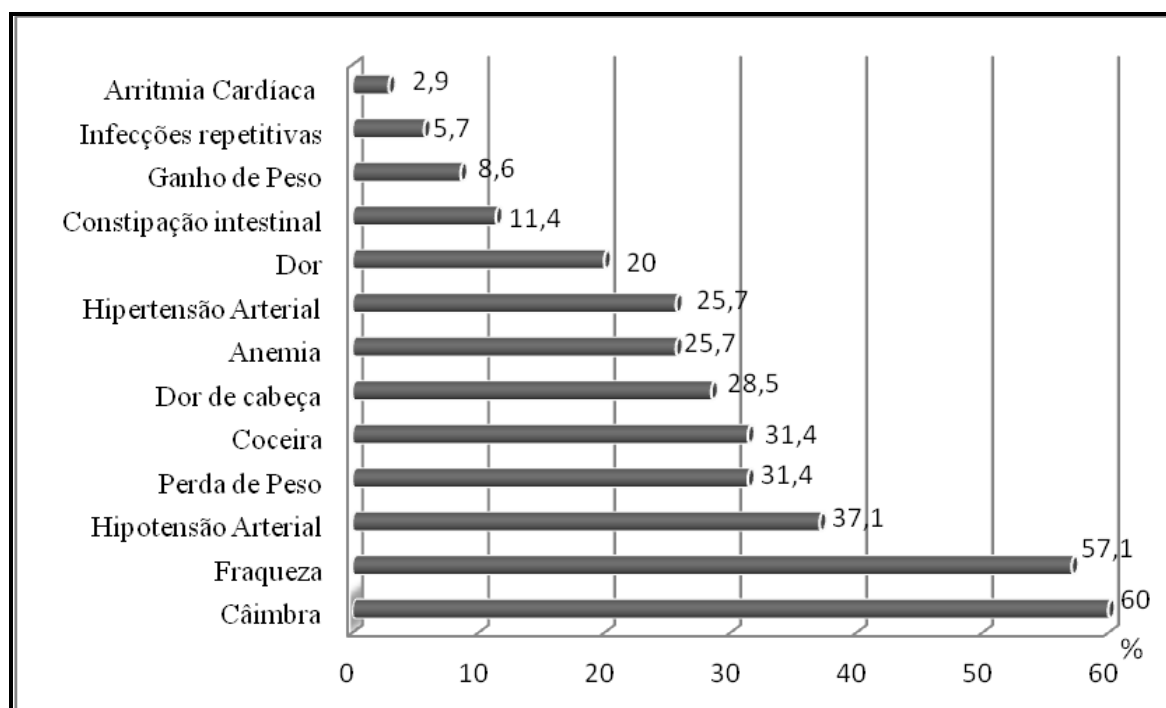


Figura 1. Eventos associados à hemodiálise e referidos pelos idosos no seu cotidiano, Ijuí/RS, 2010.

A chronic health condition, especially the DRC, brings some restrictions and problems with therapy and clinical management.

The dialysis is able to adapt the kidneys in order to maintain homeostasis and virtually terminals to the stages of CKD process, however, this adaptation rim creates an imbalance or dysfunction in the long term, contributes to weakening the overall health the individual and compromise their quality of life⁽¹⁹⁾. Thus, the chronic kidney disease had incorporated shall be in the process of living and the different situations experienced can be perceived by him as stressors, and interfere in the different dimensions of life. However, with advancing age and renal disease, perception of the individuals as to their quality of life may find modified by chronic feature of CKD and treatment, becoming common the presence of conformism regarding their health⁽¹⁹⁾.

Table 2 shows the Spearman's correlation between the interference of kidney disease in your life and perceptions of the elderly regarding the problems that bothered during the last four weeks. This statistically significant correlation was found ($p < 0,05$) muscle aches, chest pain, exhaustion and weakness/dizziness and interference of renal disease in their lives, symptoms that older people perceive as interference resulting from the disease in its life. The completion of the Spearman test, reiterates that as the disease progresses, combined with the need for hemodialysis, events occur that the elderly associated with CKD and its treatment, which in turn, affect their daily lives.

This result is corroborated by a study that found that progression of CKD and hemodialysis cause interference in the health status of people in this situation, in the

physical, mental, social interaction and general well-being, which modifies the satisfaction of patients⁽⁹⁾. The authors also punctuate the

limitations tend to increase with advancing age and that older people are more likely to comorbidities⁽⁹⁾.

Tabela 1. Frequência das percepções dos idosos referente a problemas que os incomodaram durante as quatro últimas semanas, Ijuí/RS, 2010.

Problemas	Incomoda				
	De forma alguma n(%)	Um pouco n(%)	De forma moderada n(%)	Muito n(%)	Extremamente n(%)
Dores musculares	16(45,7)	11(31,4)	4(11,4)	1(2,9)	3(8,6)
Dor no peito	23(65,7)	8(22,9)	2(5,7)	1(2,9)	1(2,9)
Cãibras	10(28,6)	14(40,0)	7(20,0)	2(5,7)	2(5,7)
Coceira na pele	14(40,0)	10(28,6)	7(20,0)	2(5,7)	2(5,7)
Pele seca	17(48,6)	9(25,7)	5(14,3)	2(5,7)	2(5,7)
Falta de ar	21(60,0)	8(22,9)	4(11,4)	1(2,9)	1(2,9)
Fraqueza ou tontura	12(34,3)	12(34,3)	4(11,4)	3(8,6)	4(11,4)
Falta de apetite	17(48,6)	8(22,9)	8(22,9)	1(2,9)	1(2,9)
Esgotamento	11(31,4)	12(34,3)	7(20,0)	2(5,7)	3(8,6)
Dormência nas mãos ou pés	20(57,1)	7(20,0)	5(14,3)	2(5,7)	1(2,9)
Vontade de vomitar ou indisposição estomacal	25(71,4)	6(17,1)	3(8,6)	-	1(2,9)
Problemas com sua via de acesso (fístula ou cateter)?	30(85,7)	3(8,6)	-	2(5,7)	-

Categorias: Problemas= escores variando de 1 para “Não me incomodei de forma alguma” até 5 para “Extremamente incomodado”.

From this perspective, hemodialysis in the elderly require peculiar care to aging and related to the disease, which are related to the

degree of dependence they have on the performance of daily activities, understanding of the disease and how to care for.

Tabela 2. Correlação de Spearman's entre a interferência da doença renal em sua vida e percepções dos idosos referente a problemas que os incomodaram durante as quatro últimas semanas, Ijuí/RS, 2010.

Problemas	r	p-valor
Dores musculares	-0,408	0,015
Dor no peito	-0,516	0,001
Cãibras	-0,267	0,121
Coceira na pele	-0,172	0,324
Pele seca.	-0,176	0,311
Falta de ar	-0,288	0,093
Fraqueza ou tontura	-0,371	0,028
Falta de apetite	0,007	0,970
Esgotamento	-0,493	0,003
Dormência nas mãos ou pés	-0,044	0,800
Vontade de vomitar ou indisposição estomacal	-0,286	0,096
Problemas com sua via de acesso (fístula ou cateter)	0,095	0,588

Categorias: Problemas= escores variando de 1 para “Não me incomodei de forma alguma” até 5 para “Extremamente incomodado”; Interferência da doença renal em sua vida = escores variando de 1 para “sempre verdade” até 5 para “sempre falso”.

CONCLUSIONS

The events associated with hemodialysis mentioned by the elderly more often were cramps and weakness. Regarding perceptions of the elderly regarding the problems that bothered

during the last four weeks, those who bothered "extremely" with highest percentages were weakness or dizziness, exhaustion and muscle pain. As for the problems that bother "moderately", presented the highest percentages were cramps, itchy skin, loss of

appetite and exhaustion. These results show that nurses should consider the perception of the elderly in relation to their reality, which often differs from the perception of the professional, to perform nursing care.

Statistically significant correlation was found ($p < 0,05$) in muscle aches, chest pain, exhaustion and weakness/dizziness and interference kidney disease, symptoms that older people perceive as resulting from the interference of CKD. Thus, as the disease progresses, combined with the need for hemodialysis, events occur that the elderly associated with CKD and its treatment, which in turn, affect their daily lives.

It is considered that the results obtained in this study allows us to understand specific aspects involved in nursing care and provides the largest professional knowledge to sustain its operations. In this sense, nursing has key role in identifying and valuing the particularities of each elderly, as they experience a unique way the reality of the treatment. Still, if scores that this study interweaves care, education, extension and management as enhanced the understanding of this emerging issue in the context studied for the elderly, family, nursing and society.

EVENTOS ASSOCIADOS AO COTIDIANO DE IDOSOS EM HEMODIÁLISE

RESUMO

Estudo teve por objetivo analisar os eventos associados ao cotidiano de hemodiálise e as percepções de incômodo de idosos renais crônicos em tratamento hemodialítico. Estudo transversal, analítico de abordagem quantitativa realizado com 35 idosos em hemodiálise em uma Unidade Nefrológica do noroeste do Rio Grande do Sul. A coleta de dados ocorreu nos meses de maio, junho e julho de 2010, por meio de formulário de caracterização sociodemográfica/clínica o *Kidney Disease and Quality of Life-Short Form* (KDQOL-SFTM). Os dados foram analisados pela estatística descritiva e Correlação de Spearmann. Quanto às características sociodemográficas, 74,3% eram homens, 65,7% com idade entre 60 e 70 anos, 60% casados. Quanto aos eventos associados ao tratamento hemodialítico, câimbras (60%) e fraqueza (57,1%) foram os mais apontados pelos idosos. Em relação às percepções dos idosos sobre os problemas que os incomodaram "extremamente" durante as quatro últimas semanas, os com maiores percentuais foram fraqueza ou tontura, esgotamento e dores musculares. Verificou-se correlação estatisticamente significativa ($p < 0,05$) entre dores musculares, dor no peito, esgotamento e fraqueza/tontura e interferência da doença renal em suas vidas. Conclui-se que esses resultados permitem compreender aspectos peculiares envolvidos no cuidado de enfermagem e proporciona aos profissionais maiores subsídios para embasar sua atuação.

Palavras-chave: Idoso. Hemodiálise. Enfermagem.

EVENTOS ASOCIADOS AL COTIDIANO DE ANCIANOS EN HEMODIÁLISIS

RESUMEN

Este estudio tuvo como objetivo analizar los eventos asociados al cotidiano de hemodiálisis y las percepciones de molestia de ancianos renales crónicos en hemodiálisis. Estudio transversal, analítico de enfoque cuantitativo llevado a cabo con 35 ancianos en hemodiálisis en una Unidad Nefrológica del noroeste de Rio Grande do Sul. La recolección de los datos ocurrió durante los meses de mayo, junio y julio de 2010, a través de formulario de caracterización sociodemográfica/clínica, el *Kidney Disease and Quality of Life-Short Form* (KDQOL-SFTM). Los datos fueron analizados mediante estadística descriptiva y Correlación de Spearmann. En cuanto a las características sociodemográficas 74,3% eran hombres, el 65,7% con edad entre 60 y 70 años, el 60% era casado. En cuanto a los eventos asociados con la hemodiálisis, calambres (60%) y debilidad (57,1%) fueron los más frecuentemente reportados por los ancianos. Con relación a sus percepciones sobre los problemas que les molestaron "extremadamente" durante las últimas cuatro semanas, los más nombrados fueron debilidad o vértigo, cansancio y dolores musculares. Hubo correlación estadísticamente significativa ($p < 0,05$) entre dolores musculares, dolor en el pecho, cansancio y debilidad/vértigo e interferencia de la enfermedad renal en sus vidas. Se concluye que estos resultados nos permiten comprender los aspectos específicos implicados en la atención de enfermería y proporcionan a los profesionales mayores contribuciones para basar su actuación.

Palabras clave: Idoso. Hemodiálise. Enfermagem.

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