74 - CHRONIC RENAL FAILURE: CARING FOR THE PATIENT TREATMENT IN HEMODIALYSIS

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INTRODUCTION

Chronic Renal Failure (CRF) is a significant cause of morbidity and is undoubtedly a specific issue of Public Health.

This condition is characterized by progressive and irreversible loss of kidney function, leading to metabolic imbalance and electrolyte, which results in a set of signs and symptoms known as uraemia or uremic syndrome (FERMI, 2003).

With the installation of the uremic syndrome is an imbalance of blood chemistry, whose symptoms involve mainly the gastrointestinal tract, nervous and cardiopulmonary. So it is necessary to perform artificial methods of purification of blood, peritoneal dialysis (PD), hemodialysis (HD) or renal transplantation (RT) (RIELLA, 2003).

From the past decade the high incidence and prevalence of CRF has alarmed the scientific community. It is assumed that for each patient in HD, there are twenty to thirty other CRF at different stages (BASTOS et al., 2004).

Therefore, the reflections that we bring to this study include two moments. At first, we will make a brief history, definitions, causes, clinical manifestations, diagnosis and treatment of CRF. Next, we will discuss the importance of nursing care provided to patients in chronic renal treatment of HD.

RESULTS AND DISCUSSION

CHRONIC RENAL FAILURE: HISTORICAL ASPECTS AND GENERAL

The CRF has been described in the mid-nineteenth century in a hospital in London, England. A doctor described it as a disease in which patients presented with generalized edema and at autopsy the kidneys with a contracted and granular appearance, indicating also the presence of complications of hypertension (RIELLA, 2003).

This condition is defined as a progressive and irreversible deterioration of kidney function which the body's ability to maintain electrolyte balance and metabolic has failure resulting in uraemia, which is the retention of urea and other nitrogenous products in the blood (SMELTZER; BARE, 2002).

The CRF can be caused by systemic diseases such as diabetes mellitus and hypertension, chronic glomerulonephritis, pyelonephritis, urinary tract obstruction, hereditary lesions, environmental and occupational agents (SMELTZER; BARE, 2002).

The clinical manifestations of the CRF affects almost all body systems and the patient usually has nausea, vomiting, anorexia, anemia, fatigue, weakness, cold, diarrhea, mental confusion, headache, uremic breath, pallor, increased time of bleeding, pericardial friction and feet and wrists fallen (FERMI, 2003).

Diagnosis is by clinical history, physical examination, dosage of blood of the urea, creatinine, bicarbonate, sodium, potassium, uric acid, calcium and phosphorus, and completion of creatinine clearance, abdominal ultrasound and renal biopsy (FERMI, 2003).

Regarding the treatment of CRF, it is divided into conservative, PD, HD and RT. Conservative treatment aims to delay the start of dialysis by means of medical support, nutritional and pharmacological (FERMI, 2003).

The PD is a process of cleansing the blood in which the transfer of solutes and fluids occurs through a semipermeable membrane, the peritoneum, which separates two compartments. A compartment is the abdominal cavity, which is contained in the dialysate solution and the other is the peritoneal capillary, where the blood with excess nitrogenous, potash and other substances. The peritoneum acts as a filter, allowing the transfer of mass between the two compartments (SMELTZER, BARE, 2002).

The HD is the dialysis method most commonly used. It is used in patients who are acutely ill and require dialysis for a short period (days or weeks) and for patients with CRF who require long-term therapy or permanent (SMELTZER; BARE, 2002).

To perform the HD is necessary a capillary dialyzer, where happens the filtration process, the water treated by reverse osmosis process, the solution of HD, which is similar to blood plasma, HD machine and the access, which can be temporary or permanent (FERMI, 2003).

As a temporary access has the double lumen catheter (DLC) and as permanent acess have to Arteriovenous Fistula (AVF), Permcath and the prosthesis. Traditionally, the HD is held three times a week for four hours (BERTOLIN, 2007).

The RT, Riella (2003) argues that today is the best treatment option for patients with CRF, both from a medical perspective, the social or economic. It is indicated when there is end-stage CRF, with the patient on dialysis or even in pre-dialysis.

NURSING CARE RELATED TO THE PATIENT WITH CHRONIC RENAL FAILURE UNDER THE HEMODIALYSIS

The success of the care provided to patients and their families in a clinic of HD involves the cooperation of a multidisciplinary team and although they give to doctors and nurses, the largest share of responsibility and authority, it is essential to participation by other professionals who may act as nutritionists, psychologists, social workers and others (FERMI, 2003).

In this multidisciplinary team, highlight the nurse who performs many functions in the management of HD is not possible in this way to separate the administrative functions, care, education and research functions as they are interdependent and complementary in order to better customer service (Bezerra; CRUZ , 2001).

With regard to nursing care prior to the HD, Bezerra; Cruz, (2001) emphasize that they include direct the patient to weigh themselves or seek assistance at the time of weighing, washing arms with soap at the sink in room dialysis to prevent infections and after drying them with paper towel and check blood pressure.

The same author stresses that during the treatment many complications can arise among, them is the imbalance of water and electrolytes, mainly sodium, potassium. The patient may also muscle cramps, nausea or vomiting, transfusion reaction, aneurysm, hemorrhage, disruption of vascular access, dialysate leakage, bleeding, infection, fever and chills, hemolysis, convulsions, hypertension or hypotension, disequilibrium dialysis syndrome, first use syndrome , embolism, sepsis,

and hyperthermia.

When the patient has one of these complications, the nursing staff must be trained to act efficiently in order to prevent or treat possible complications during hemodialysis (FERMI, 2003).

The nurse should guide both the staff that is under his direction as to the diabetic patients not administer insulin in the days of HD. Riella (2003) says that such conduct is necessary because in CRF reduces the plasma clearance of drugs whose elimination mechanisms depend on the functional integrity of the kidneys, so the permanence of the level of insulin in the blood is prolonged and the needs decrease.

Bulecheck and McCloskey (1992) apud Cruz (1995) refers to the requirements of nursing related to construction of AVF include customer information and family about the surgery, the type of anesthesia, the site of surgery is commonly performed in the forearm not dominant, position slightly higher than the surgeon member in the first days after surgery should remain the replacement of the dressing by the nurse, the withdrawal of points should be eight days after surgery and the start of the exercises activation by manual compression. They can control the blood pressure and hydration of the patient in the preoperative period, avoiding episodes of prolonged hypotension and hypovolemia, which may compromise the potency of the fistula.

An important nursing care is to start the HD session, to be sure the puncture is adequate to maintain blood flow to a maximum of 200 ml / min. After making sure that the puncture is adequate blood flow must be increased to between 350 and 400 ml / min and maintain this flow during the entire dialysis (FERMI, 2003).

Silva et al (1996) reports that the strategy for pollution control system HD should include the disinfection of all components such as tanks, pipes and machinery at the same time that consideration be given to disinfection. It is also necessary to disinfect the machines HD at the end of each treatment session.

To prevent clotting in the extracorporeal circuit, a dose of heparin is administered to produce anticoagulation system, and this, individualized and calculated based on the patient's weight (SILVA et al, 1996).

The dialyzer and arterial and venous lines can be used for the same patient to twelve times, when using the manual reprocessing, or even twenty times when used automatic rehashing. After measuring the internal volume of the fibers, any result indicating a reduction of more than 20% of the initial volume, makes it compulsory to discard the dialyzer, regardless of the method used for reprocessing (SILVA et al, 1996).

The task of nursing perform the removal of the sterilizing solution by making circular saline 0.9% through the blood compartment while running the heated dialysate through the dialysate compartment for 15 minutes. The circuit of blood should be checked as the trace amounts of germicide immediately before use (FERMI, 2003).

CONCLUSION

The realization of this study offered to identify aspects that concern the CRF and nursing care to patients submitted to HD suffer from this condition, and arrived the conclusions: We saw that the CRF is a significant cause of morbidity and is undoubtedly specific issue of Public Health. The treatment of CRF may be through HD, PD and RT, and the HD the most used.

In reviewing the nursing care of patients with CRF undergoing HD, we saw that the nurse performs many functions in management, it is not possible to separate the administrative functions, care, education and research functions as they are interdependent and complementary in order to better customer service.

Therefore, the success of care and that patients and their family involves the cooperation of a multidisciplinary team and although they give to doctors and nurses, the largest share of responsibility and authority, it is essential to participation by other professionals.

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CHRONIC RENAL FAILURE: CARING FOR THE PATIENT TREATMENT IN HEMODIALYSIS

Chronic Renal Failure (CRF) is a significant cause of morbidity and is undoubtedly specific issue of Public Health. Aimed to provide an updated review of the CRF and nursing care to patients on hemodialysis (HD) with CRF. The results showed that CRF is a progressive and irreversible deterioration of kidney function which the body's ability to maintain electrolyte balance and metabolic has failure, necessitating the use renal therapies. Among these therapies highlight the HD, being the treatment method most used in CRF. Regarding nursing care, we saw that the nurse performs many functions in the management of HD, it is not possible to separate the administrative functions, care, education and research functions as they are interdependent and complementary in order to better customer service. Finally, we conclude that the success of care provided to patients with CRF

undergoing HD and their families involves the cooperation of a multidisciplinary team and although they give to doctors and nurses, the largest share of responsibility and authority, it is essential to the participation of other professionals.

KEYWORDS: Chronic Renal Failure, Hemodialysis, Nursing Care.

L'INSUFFISANCE RENALE CHRONIQUE: SOINS DE TRAITEMENT DES PATIENTS EN HEMODIALYSE

L'insuffisance rénale chronique (IRC) est une cause importante de morbidité et est sans aucun doute question particulière de la Santé publique. Visant à fournir un bilan actualisé de l'IRC et des soins infirmiers aux patients sous hémodialyse (HD) à l'IRC. Les résultats ont montré que l'IRC est une détérioration progressive et irréversible de la fonction rénale dans la capacité du corps à maintenir l'équilibre électrolytique et une insuffisance du métabolisme, ce qui nécessite l'utilisation thérapies rénales de replacement. Parmi ces thérapies souligner la HD, soit la méthode de traitement la plus utilisée dans l'IRC. S'agissant des soins infirmiers, nous avons vu que l'infirmière remplit de nombreuses fonctions dans la gestion de la HD, il n'est pas possible de séparer les fonctions administratives, de soins, d'enseignement et de recherche car ils sont interdépendants et complémentaires pour commander le service client de meilleure qualité. Enfin, nous concluons que le succès des soins prodigués aux patients atteints d'IRC en cours HD et de leurs familles impliquent la collaboration d'une équipe multidisciplinaire et bien qu'ils donnent aux médecins et aux infirmières, la plus grande part de responsabilité et d'autorité, est essentielle à la participation d'autres professionnels qui agissent mai, sous quelque forme ou systématique.

MOTS-CLÉS: Insuffisance rénale chronique; Hémodialyse; Soins infirmiers.

INSUFICIENCIA RENAL CRÓNICA: CUIDADO CON LOS PACIENTES EN TRATAMIENTO DE DIÁLISIS RENAL

La insuficiencia renal crónica (IRC) es una causa significativa de morbilidad y, sin duda, es un problema peculiar de la Salud Pública. Destinado a proporcionar una revisión actualizada de la IRC y los cuidados de enfermería a los pacientes en Diálisis Renal (DR) con insuficiencia renal crónica. Los resultados mostraron que IRC es un deterioro progresivo e irreversible de la función renal en la capacidad del cuerpo para mantener el equilibrio electrolítico y la insuficiencia metabólica, que requieran el uso de terapias renal substutiva. Entre estos tratamientos destacan la alta definición, siendo el método de tratamiento más utilizado en el IRC. En cuanto a los cuidados de enfermería, vimos que la enfermera realiza muchas funciones en la gestión de alta definición, no es posible separar las funciones administrativas, atención, educación y funciones de investigación, ya que son interdependientes y complementarios a fin de mejorar el servicio al cliente. Por último, llegamos a la conclusión de que el éxito de la atención prestada a los pacientes con IRC sometidos a DR y sus familias implica la cooperación de un equipo multidisciplinario y, aunque se dan a los médicos y enfermeras, la mayor parte de la responsabilidad y autoridad, es esencial la participación de otros profesionales que pueden actuar en cualquier forma o sistemática.

PALABRAS CLAVE: Insuficiencia Renal Crónica, Diálisis Renal, Atención de Enfermería

INSUFICIÊNCIA RENAL CRÔNICA: CUIDADOS COM O PACIENTE EM TRATAMENTO DE HEMODIÁLISE

A Insuficiência Renal Crônica (IRC) constitui causa significativa de morbimortalidade e é, sem dúvida, questão peculiar de Saúde Pública. Objetivamos realizar uma atualização bibliográfica sobre a IRC e os cuidados de enfermagem ao paciente submetido à Hemodiálise (HD) com IRC. Os resultados mostraram que a IRC é uma deterioração progressiva e irreversível da função renal em que a capacidade do corpo para manter o equilíbrio metabólico e hidroeletrolítico falha, sendo necessário o uso terapias renais substutivas. Dentre essas terapias destaca-se a HD, por ser o método de tratamento mais utilizado na IRC. Quanto aos cuidados de enfermagem, vimos que o enfermeiro executa inúmeras funções no gerenciamento da HD, não sendo possível separar as funções administrativas, assistenciais, educativas e de pesquisa, pois são funções interdependentes que se completam visando à melhor assistência ao cliente. Por fim, concluímos que o sucesso da assistência prestada ao paciente com IRC em tratamento de HD e a sua família envolve a cooperação de uma equipe multidisciplinar e, embora se atribua a médicos e enfermeiros a maior parcela de responsabilidade e autoridade, é indispensável à participação de outros profissionais que poderão atuar de forma eventual ou sistemática.

PALAVRAS CHAVES: Insuficiência Renal Crônica, Hemodiálise, Cuidados de Enfermagem.

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