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Patients in peritoneal dialysis: in the general hospital of zacatecas follow-up of 16 months (may 2011-september 2012)

Abstract

As a manifestation of an epidemiological transition chronic no communicable diseases, and with them the end stage renal disease (ESRD) has increased their impact in relation to infectious diseases. Chronic kidney disease is a public health problem because of his high incidence, morbidity and socioeconomic costs. It tries his detection, early treatment, prevent progression to end stage renal disease, retard cardiovascular complications and prepare them for replacement therapy: peritoneal dialysis (PD) hemodialysis (HD) or renal transplantation, with increasing of early death and hospital admission, cognitive impairment and poorer quality of life. Mexico is the country where is used more, with a mortality rate of 13.8% per year, in Spain in 2011, one year mortality of 15.93% In the "Hospital General de Zacatecas", the substitution method is peritoneal dialysis. Were detected in May 2011, 38 patients with End Stage Renal Disease (ESRD) and that management was followed up to 16 months and was found to be terminally ill or it is associated with HAS 100% and DM 65.7%, in stage 5 (97.3%) or 4, In these stages is indicated the replacement therapy. The Complications presented were: catheter dysfunction (one time 15%, 2 time 10% and 3 times 7%) and peritonitis in 64%,heart failure 21%, meantime in USA appears one episode every 24 or 60 months/dialysis/patient. Complications associated with certain pathologies age, start of dialysis therapy and care in public institutions or at home. When it's not treated properly, increases the rate of peritonitis-patient-month with higher spending and hospitalization, this should influence to search new ways to introduce replacement therapy in our hospitals especially in renal transplants.

This should influence the search of new ways to introduce replacement therapy in ours hospitals especially in renal transplantations. Mortality was only 10% lower than that reported in Spain in 2011, the year of 15.93%, for which we have no logical explanation.

Keywords: end stage renal disease, peritoneal dialysis, peritonitis

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Introduction

As manifestation of an epidemiological transition in Mexico, in recent years non-communicable chronic diseases and with the NT have increased their incidence in relation to infectious diseases. Since the NKF (National Kidney Foundation) and KDIGO (Kidney Disease: Improving Global Outcomes) defined and classified chronic kidney disease (CKD), it has been considered a public health problem,[1,2] due to its high incidence, morbidity and mortality and socioeconomic cost. Attempts are made to detect and treat it early, to establish measures to prevent progression to terminal nephropathy (NT), to delay complications and to prepare them for replacement therapy.[3] According to the KDOQI guidelines, prevalence in elderly people is very high. a physiological process of aging,[4,5] (after 30 years the glomerular filtration rate decreases of 0.75-1 ml/min/year)[6] and because they present with atherosclerosis, heart failure, arterial hypertension, diabetes mellitus , which they can condition it and worsen the prognosis by reaching NT. The NT requires a replacement therapy: peritoneal dialysis (PD), hemodialysis (HD) or kidney transplant, only 20% is a candidate for transplantation, the rest and those who are waiting should choose one of the two options with increased risk of: early death, numerous hospital admissions, cognitive deterioration and worse quality of life.[6] 25% of the world population in dialysis is in Latin America and Mexico, it is the country where it is most used.[7] With a mortality per year of 13.8%, at 2 years 33.1%. At 6 years 62.5%, in Spain in 2011, at the year of 15.93%. In chronic dialysis there are complications due to NT, due to their underlying disease or by the technique. In the USA, an episode of peritonitis is acceptable every 24 months, up to one every 60 months/dialysis/patient.[8]

Peritonitis is one of the main complications, increases morbidity and mortality (4%, higher in fungal, and gram-negative) and provokes failure of the technique. Involved virulence gramnegative[9] lower curing 60%,[10] origin: contamination, infection or intraabdominal exit tunnel[7] the causative organisms and different sensitivities in each center[5,11,12] Episodes of peritonitis influence long-term mortality with the development of the malnutrition-inflammation-arteriosclerosis syndrome (MIA) which is maintained for 6 weeks of clinical remission and causes lesion of the peritoneal membrane, deterioration of the general state, immunological, nutritional and exacerbation of inflammation, promoting atherosclerosis with more risk of death and/or failure of the technique. 45.5% of the deaths are cardiovascular.

Other complications: Tunelitis (infection of the exit area of the catheter) abdominal hernia, rectocele, cystocele, esophageal hernia, lumbar pain, hemorrhoids, scrotal edema due to increased intra-abdominal pressure. Hydrothorax Unidirectional catheter obstruction, blood in peritoneal fluid and leaks. In the General Hospital of Zacatecas, the replacement method we have is peritoneal dialysis and we seek to make a cut and see the success or otherwise of the

application of this therapy and if there are faults, solve them to improve the prognosis in patients with NT.

Material and method

Patients with NT were detected in peritoneal dialysis who came to the General Hospital of Zacatecas, in May 2011, analyzed: sex, age, hereditary family history, pathological personal and KDOQI classification, followed up for 16 months, emphasizing the complications, change of substitution therapy and survival. We excluded those who did not have a diagnosis of NT or who had other substitution therapy than PD.

Results

38 patients, 20 men (52.63%) and 18 women (47.36%) (Figure 1). The ages fluctuated in three groups: Children (0-12 years old) (0%). Adults (from 20-29, 13.15%, 30-39, 7.89%, 40-49.7.89%) 28.93% and older adults (50-59, 23.68%, 60-69, 26.31%, 70-79, 21.05 %) 71.04% (Figure 2). Family Hereditary Background: DM 60%, HAS 60%, Ca 18.4%, Obesity 2.6%, CI 5.2%, Nephropathies 2.6%, AR 2.6% (Figure 3). Non-pathological Personal Background: alcoholism 42.1%, smoking 39.4%, drug addiction: ma rih uana 2.6% and cocaine 2.6% Figure 4. Pathological Personnel: HAS 38 (l00%), DM 25 (65.7%), (2.63%), Atrial fibrillation 1 (2.63%), nephrolithiasis I (2.63 %) (Figure 5). Classification of KDOQI: Stage 5, 97.3%, stage 4, 2.6% (Figure 6) Complications: catheter dysfunction, (once 15%, 2 times 10%, 3 times 7%) total 32%, peritonitis 32%, heart failure 21.0%, uncomplicated 18%, uremic S. 13%, 10.% died, Tunelitis 10%, pleural effusion 3(7%), ischemic CardioPAT ed 2 (5%), sepsis 2 (5%), derra I pericardial 2%, 2% ascites, emergency Hypertensive 2% (Table 1) .The presented several complications in the same patient (Figure 7).

Table 1 Complications

Complications	Catheter dysfunction	Peritonitis	Heart failure	Uremic s and encephalopathy	Without complications	Death	Tunelitis
Percentage	32%	32%	twenty-one%	twenty%	18%	10%	10%
Complications	heart disease ischemic	sepsis	hepatic insufficiency	Severe respiratory insufficiency	STDA cerebral infarction	hypertensive emergency	
Percentage	5%	5%	two%	two%	two%	two%	

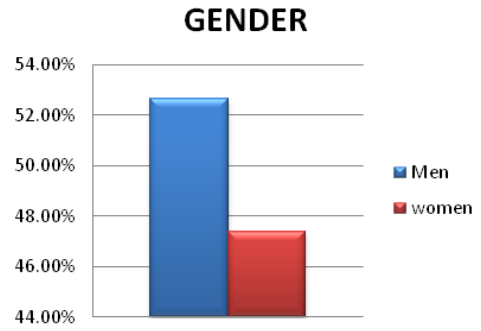

Figure 1 38 patients, 20 men (52.63%) and 18 women (47.36%).

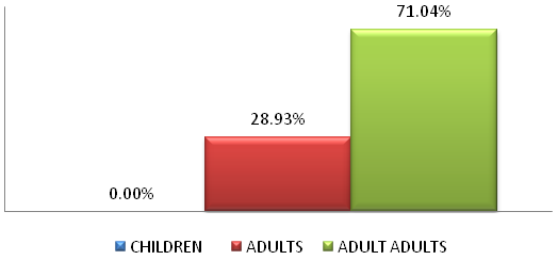

Figure 2 The ages fluctuated in three groups.

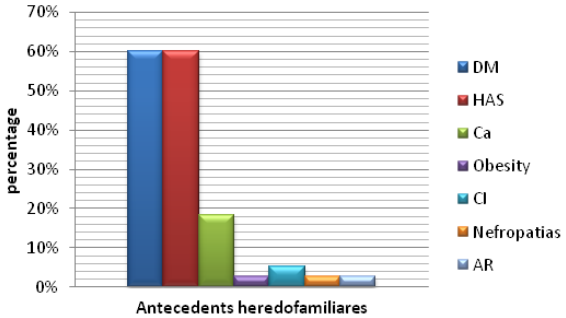

Figure 3 Family hereditary background.

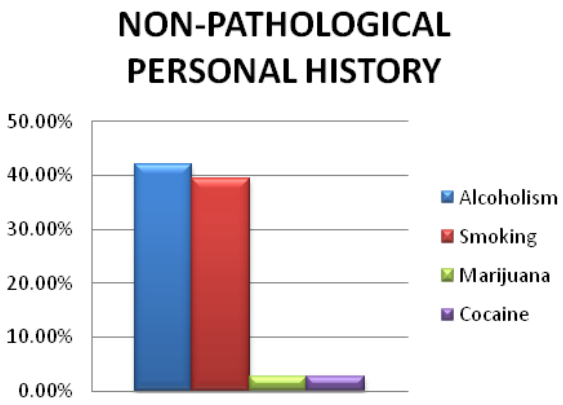

Figure 4 Non-pathological Personal background.

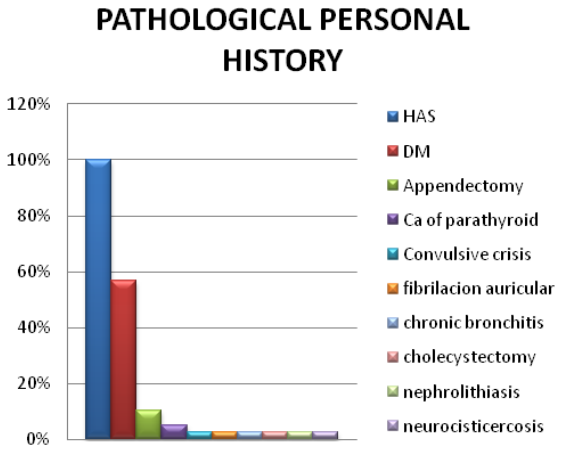

Figure 5 Pathological Personnel: HAS 38 (l00%), DM 25 (65.7%), (2.63%), atrial fibrillation 1 (2.63%), nephrolithiasis I (2.63 %).

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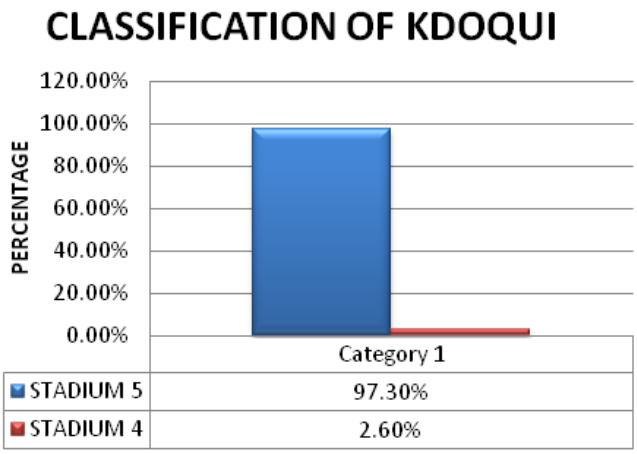

Figure 6 Classification of KDOQI.

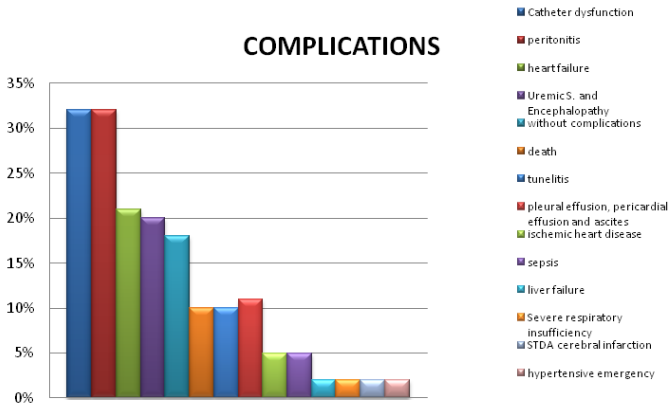

Figure 7 Complications.

Commentary

The pathology has no gender predilection is presented in equal numbers of men than women. It affects all age groups, predominates in those over 50 years (71%) because it is the terminal phase of chronic non-communicable diseases. We have a low incidence of drugs as causes, marijuana and cocaine, the case of each one, but I believe that in the future they will increase due to the boom in their consumption. It is terminal phase or is associated with 2 of the most prevalent pathologies in our environment HAS l00% and DM 65.7%. We found them in stage 5 (97.3%) or 4, because substitution therapy is being indicated in these stages. Most common complications are catheter dysfunction (once 15%, 2 times 10%, 3 times 7%) and peritonitis in 64%, heart failure 21%, uremic S. 13%, Tunnelitis 10%, pleural effusion 7% , very much recommended in the USA where an episode is considered acceptable every 24 or every 60 months/ dialysis/patient. The complications are associated, mainly in our series, with inadequate care in public institutions or at home, which increases the rate of peritonitis-patient-month with greater expense and hospital stay, which is a determining factor in seeking to resolve these deficiency with medical education, besides looking for new forms of substitute therapy in our hospital, fundamentally kidney transplantation. Mortality was only 10% lower than that reported in Spain in 2011, to the year of 15.93%, for which we have no logical explanation.

Acknowledgments

None.

Conflicts of interest

Author declares that there is no conflict of interest.

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