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High Prevalence of Anti-Hepatitis C Antibody Positive Patients in a Haemodialysis Unit in Bulgaria. Vesselin D. Nenov, Svetla V. Staykova, Dimitr S. Nenov. Clinic of Nephrology and Haemodialysis, Medical University of Varna, Varna, Bulgaria.

First generation ELISA tests for anti-hepatitis C virus (HCV) antibodies were used for the first time in our dialysis unit after 1996 to test some patients. 15% of all patients were known to be positive until 2000, and all were dialysed on dedicated machines, but not in a separate room, after they were found to be positive. Second generation anti-HCV antibody has became available for the first time in 2001 for all patients in our dialysis unit. 39 out of 73 patients (53%) were found to be anti-HCV antibody positive. There were no HIV-positive patients and 3 (4%) HBsAg-positive patients. HBsAg-positivity has never been higher than 5% in our dialysis unit and is comparable and even lower than a 10% reported prevalence of HBsAg-positive subjects in the general population. All HBsAg-positive patients were found positive before initiation of dialysis treatment and, therefore, there were no new contractions of the hepatitis B virus related to the dialysis treatment. HBsAg-positive patients were, however, always dialysed in a separate room and on dedicated machines. None of them was found to be anti-HCV positive. 7 out of 12 anti-HCV positive patients, who have already died, had liver cirrhosis with ascites. Our data suggest a high rate of conversion of chronic HCV hepatitis into liver cirrhosis in dialysis patients. In a unit dialysing HBsAg-positive patients in a separate room prevented the spread of hepatitis B virus.
Infections are the second cause of death after cardiovascular diseases in patients with end-stage renal failure (ESRF). Immune deficiency related to uremia plays an important role in the pathogenesis of infections (Powe N. et al., 1999). Whenever bacterial pathogens are involved, their site of entry in 50-80% is the percutaneous access: central venous catheters, vascular prostheses, peritoneal catheters and A-V fistulas. Such infections are the cause of hospitalisation in 15% of patients with ESRF (D. Schaffer et al., 1995). Risk factors for occurrence of bacterial infections are also patients’ age, diabetes mellitus, iron overload, low serum albumin, and decreased phagocytotic activity (B. Canaud, 1999; DOQI, 1997). Catheter-related bacteremia in dialysis patients occurs at a rate of 3.9-8.6 episodes per 1000 catheter days (K.Kairatis et al., 1999). In order to assume a catheter-related sepsis, bacterial counts from blood cultures must be four times higher than those from the vascular catheter (Capdevila et al., 1993). It is probable that endoluminal contamination of the vascular catheter occurs at the connector end, where microorganisms appear from the skin, and form a microbial biofilm. This factor of virulence is frequently unrecognized, although being a major source of catheter-related bacteremia (B. Canaud, 1999).

Bacterial colonization of permanent vascular accesses, such as fistulas and grafts is a frequent complication of vascular stenosis and vascular thrombosis and a frequent cause

ABSTRACT


The 8-iso-prostaglandin F$_2\alpha$ (8-iso-PGF$_{2\alpha}$) is a characteristic F$_2$-isoprostane which is produced in humans via free radical-catalyzed lipid peroxidation mechanism of arachidonic acid and it is independent from the cyclooxygenase synthase pathway. The measurement of plasma levels of 8-iso-PGF$_{2\alpha}$ has been proposed to be the most reliable biochemical index of lipid peroxidation and oxidative stress status in patients with a great number of pathological conditions including the hemodialysed patients. However, there are no references in the literature about local muscle interstitial 8-iso-PGF$_{2\alpha}$ production and movement during hemodialysis. In this study, two microdialysis probes were inserted with CMA-60 microdialysis catheters into the vastus lateralis of the quadriceps femorus muscle group of the right leg of three stable male patients with end stage renal failure, undergoing hemodialysis. The dialysate fluids were collected i) during 60 min before hemodialysis, ii) during 0 min-60 min, 60 min-120 min, 120 min-180 min and 180 min-240 min during hemodialysis and iii) during 0 min-60 min after hemodialysis. The results have shown that the muscle interstitial fluid (i.f.) levels of 8-iso-PGF$_{2\alpha}$ a) one hour before hemodialysis were higher than in normal people b) The i.f. levels of 8-iso-PGF$_{2\alpha}$ during hemodialysis were higher than before hemodialysis c) The i.f. levels of 8-iso-PGF$_{2\alpha}$ one hour after hemodialysis continued to be higher than before. The measurements show that during hemodialysis there is an increase of lipid peroxidation and increased oxidative stress.

**Tuberculosis on transplanted kidney case report**

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We report the case of a 31-year-old man who was re-admitted to regular haemodialysis treatment because of chronic rejection of a renal transplant. The patient with ESRD due to unknown cause was treated with chronic haemodialysis for 1 year and then received a living donor kidney transplant from his father. Two months after transplantation the patient suffered a thrombophlebitis on his right leg and an episode suspected of pulmonary embolism. He underwent a fibrobronchoscopy during the diagnostic workup and was treated with wide-spectrum antibiotics. Three months later was diagnosed pulmonary tuberculosis by positive culture of bronchoalveolar lavage. Tuberculostatic therapy in standard regimes and dosage was started and continued for 9 months. At the end plasma cyclosporine was found low and cyclosporine dose was increased. Rifampicin dose was soon decreased and plasma cyclosporine level was then found very high. Serum creatinine started to rise progressively. The immunological tests with flow cytometry suggested bacterial infection instead of rejection. Urine and sputum were negative for tuberculosis by culture. 6 months later the patient started chronic dialysis treatment again. The kidney was explanted thereafter due to recurrent episodes of chills during haemodialysis and at home without febrility. The explanted graft revealed caseously productive tuberculosis of the graft.


**Tuberculosis in patients on chronic dialysis and renal transplantation**

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The patients on haemodialysis and renal transplantation are at increased risk for developing of active tuberculosis (TB) than the general population. The signs and symptoms of TB infection are often discreet and unspecific in this group. Prognosis and survival rate significantly depend on early diagnosis and adequate treatment. Aim: to analyze the incidence of active TB in patients (pts) on chronic dialysis and renal transplantation.

**Methods:** it was done a retrospective analysis of patients on chronic dialysis for a 5 years period. Total number of dialysed pts was 637; annual number 127. We found active TB in 10 pts, 2 of them receive transplantation. 7 from 10 pts were male and 3 female. The mean age was 38.1 years. 4 pts were anti HCV positive and all HIV negative. The diagnosis of TB was established by positive culture and/or histology, radiological-and clinical manifestations, skin tuberculin

Abstract

**OBJECTIVE:**
The concentration of 8-iso-prostaglandin-F2 alpha (8-iso-PGF2 alpha in biological fluids has been considered as the most reliable biochemical index of the lipid peroxidation and oxidative stress in patients with several pathological conditions including end stage renal failure. However, there is no reference regarding the influence of Hemodialysis (HD) on the values of 8-iso-PGF2 alpha in the muscle Interstitial Fluid (IF) of patients with end stage renal failure. The aim of our study was to determine 8-iso-PGF2 alpha concentration in the IF during hemodialysis and the gradient between plasma and IF in patients with end stage renal failure.

**DESIGN:**
In this study, two microdialysis probes were inserted into the vastus lateralis muscle of the right leg of six male patients with end stage renal failure who were on hemodialysis, and in six healthy males (controls). The samples of IF (12 dialysate fluids) were collected after an equilibration of 30 min: a) during the 1st hour preceding hemodialysis (group CRF0), b) during the 1st, 2nd, 3rd and 4th hour while on hemodialysis (groups CRF1, CRF2, CRF3 and CRF4) and c) during the 1st hour following hemodialysis (group CRF5). At the end of the above periods and simultaneously, blood samples were drawn from the arteriovenous fistula. In the controls, the IF samples (twelve dialysate fluids) were collected during a period of one hour and the blood samples at the end of this period. The levels of 8-iso-PGF2 alpha were measured with an enzyme-immunoassay method. Statistical evaluation was carried out with the statistical program NCSS 2000 and the ANOVA test.

**RESULTS:**
Plasma and IF levels of 8-iso-PGF2 alpha in the patients were significantly higher than in controls at base line. During hemodialysis, the 8-iso-PGF2 alpha rose progressively both in plasma and IF but remained higher in plasma than in IF.

**CONCLUSIONS:**
Lipid peroxidation is higher in patients on hemodialysis than in controls but it is lower in the IF compared to plasma. The mechanism for this gradient is speculative.

**Abstract.**

With age infections of the urinary tract and the asymptomatic bacteriuria become more often in both genders. Ascending path of the infection dominates in elderly patients. Very important factor is the weakening of the protective mechanisms due to the changes in the glomerules and the tubular interstitial system of the kidney. Typical symptoms of the infection of the upper urinary tract may be missing. Clinically often is defined by: nausea, pain in the abdomen and difficulty breathing. E.coli remains the most common uropathogen in elderly, but occurs with less frequency than in younger population, there are also increased rate of UTIs with other strains such as Proteus, Klebsiella, Enterobacter, Seratia, Pseudomonas. In elderly patients Staphylococcus saprophyticus is not isolated and the frequency of the urinary infections caused by Gram + microorganism is higher, especially by the male population.

**Key words:** urinary infections, microorganisms, kidney diseases


**Abstract**

Rheumatoid arthritis (RA) is a chronic systemic connective tissue disease with multiple organ impairment and unknown aetiology.

Rheumatoid arthritis leads to activation of immune processes and formation of abnormal antibodies. They participate in antigen-antibody complexes and accumulate in various tissues (mainly in synovial tissue). The removal of circulating complexes through plasmapheresis (PP) has good clinical effect (elimination of the nodules in RA).

The aim of the study is to monitor the clinical effect and to establish the clinical changes after plasma exchange (PE) in patients with RA.

PP achieves immunomodulation but it is necessary to continue the supporting cytostatic therapy to avoid the so-called rebound effect.
Научни публикации в български списания

A9. Стайкова, Св., В. Ненов, В. Калудова, К. Ненов. Съдовият достъп – причина за бактериемия при болни на хемодиализа. Актуална нефрология, бр.2 (4), 2002, 3-6

Резюме: Инфекциите са втората причина за смъртност при болни с терминална бъбречна недостатъчност след съдовосъдовите заболявания. Обикновено медицинските експерти са централизирани в зонките на деканите на отделите, съдържащи протези и AV-фистулите. Материал: Включени са 36 болни на възраст 45±7,5 години. Резултати: Изолирани са 42 патогенни бактерии от 36 болни, в 7 холтери бяха отитации. Най-често са установени Staphylococcus aureus (43,3%), следван от Acinetobacter baumannii (11,9%), Klebsiella pneumoniae (4,7%) и единично изолирани на Candida albicans и Enterobacter. Подобните бактериални култури са изолирани най-често между 14-и и 23-и днев след постъпването на категера. Катетър-асоциираните инфекции са установени в 75% от 36-те болни на диализа с времеини съдов достъп в това проучване. Тях е значително по-високо в сравнение с други групи от 25 болни (средна възраст 35 г.) с централен венозен катетер от генерално стажиращи, при които бактериалните патогени са изолирани в 25% (p<0,001). Заключение: Установен е висок процент на катетър-асоциирани инфекции в центъра по хемодиализа, като най-често е изолиран St. Aureus като патоложещ бактерии. Затова е неизбежно поставянето и манипулиране на нозони категери за хемодиализа като важни фактори, снижаващи имунитет (като клетъчно-нозони, така и хуморално) могат също да довеждат за катетър-асоциирани инфекции при болни на хемодиализа.


Резюме: Редица бъбречни заболявания протичат с увреден имунитет, който допълнително се променя при хемодиализа. Изследвани са 42 болни: 18 с хронична бъбречна недостатъчност (ХБН) и 24 на периодична хемодиализа (ПХД). Бе извършена имунофенотипната характеристика на лимфоцитите в периферната кръв, експресиращи антителите CD3, CD19, CD4, CD8, CD16+56, маркера за късна активация на T-лимфоцитите – HLA-DR, и адхезионите молекули CD54 (ICAM-1) и CD11a (LFA-1) с цел да се потърсят промени в тези параметри като отражение на функциите на имунната система. Намерени са статистически значими увеличена експресия на талоните Т-лимфоцити (80% при ПХД, 72% с ХБН и 65.8% при контролите) и субтравелете Т-хелпери, T-супресорни клетки, намален процента на B-лимфоцитите – 7% при ПХД и 12.5% при контролите и намалени NK клетки. Установи се понижена експресия на адхезионната молекула ICAM-1 и увеличена на LFA-1 върху Т-лимфоцитите. По-големи са различията при пациентите на ПХД. Предполага се, че уврежда-нето на имунния отговор се увеличава у диализан
Summary: The course of a series of kidney diseases is characterized by impaired immunity additionally altered during hemodialysis. This study covered 42 patients: 18 with chronic renal failure (CRF) and 24 on periodic hemodialysis (PHD). The immuno-phenotypic characterization of lymphocytes in peripheral blood expressing antigens CD3, CD4, CD8, CD19, CD16+56, marker of late activated T-lymphocytes – HLA-DR, and adhesion molecules ICAM-1 (CD54) and LFA-1 (CD11a) was investigated with the aim to reveal the changes in the cell immunity. Statistically significant increased expression was established in regard of total T-lymphocytes (80% in PHD, 72% in CRF and 65.8% in controls), the subtypes of T-helpers and T-suppressors and adhesion molecule LFA-1 on T-cells. Decreased percent age of B-lymphocytes, NK-cells and adhesion molecule ICAM-1 on T-lymphocytes was found. A conclusion was drawn that immune response damage in PHD patients resulted mainly from the impaired expression of the adhesion molecules.

Summary: There are deep disturbances of humoral and cellular immunity in uremia, connected with activation of T-cells, functional changes of PMN, macrophages and complement. Dialysis membranes impair leucocyte’s function and it results in bacterial infections.
Abstract: Plasmapheresis has been applied successfully during the last 20 years in the complex treatment of over 150 different diseases, but a clinical effect has been demonstrated in only about 40 of them.

Plasmapheresis was applied in our clinic most frequently in patients with immune and autoimmune nephropathies, aiming to decrease mechanistically pathologically elevated antibody titers, autoantibodies and circulating immune complexes (CIC). The method was applied in 38 patients with chronic glomerulonephritis; 28 patients with lupus nephropathy; 7 patients with Henoch-Schönlein nephritis. After timely treatment with 3-5 plasmaphereses continuous immunosuppression was initiated. Significant reduction of antibody titers and circulating immune complexes was achieved.

The method was also applied in 43 patients with malignant myeloma. The goal was reduction of plasma viscosity (prevention of thrombosis) and slowing the progression of myeloma nephropathy. Significant reduction of pathologically elevated plasma viscosity was observed and a detoxicating effect of plasmapheresis was demonstrated.

The plasmapheresis procedures were performed by two methods: centrifugal, with a Haemonetics M-30 device or by plasmaphilatration. An average of 1241 ml plasma was removed during a single procedure. Plasma and or saline were used for substitution.

In 59.1% of our patients clinical remission was achieved. However, slowing the progression of renal failure could not be achieved in patients with moderately advanced stages.

| Key words: | haemodialysis, stress, aggression |

**Summary.** A psychological examination was carried out of 105 patients on maintenance haemodialysis treatment at regular intervals in centres for haemodialysis: Varna, Rousse, Veliko Tarnovo, Targovishte and Razgrad. It was observed that patients are permanently influenced by stress situations. 54.62% of patients show no inclination for aggression while 37.96 have a totally aggressive attitude, mostly verbal. The reasons for the stress level at which medical staff works are rendered and the most important one, in the opinion of the questioned people is the specific manner of care with chronic diseased patients. Periodical conversations with both the staff and patients are suggested in order to control the level of stress in the centre for haemodialysis.

| Key words: | haemodialysis, stress, aggression |

ABSTRACT

Stenotrophomonas maltophilia (S. maltophilia) was considered to be an organism with limited pathogenic potential, which was rarely capable of causing diseases in human other than those who were in immunocompromised state. More recent studies have established that the bacterium can behave as a true pathogen. Bacteremia is one of the most common manifestations of S. maltophilia infection. Most cases are associated with risk factors, including infected intravenous devices, prior antibiotic therapy and prolonged hospitalization. We present a case of catheter related bacteremia due to S. maltophilia in a chronic haemodialyzed patient. The clinical significance of S. maltophilia, the susceptibility of this species to different classes of antimicrobial agents and the management of S. maltophilia infection are discussed.

Keywords: Stenotrophomonas maltophilia, bacteremia, antimicrobial resistance


The creation and maintenance of functioning vascular access, along with the associated complications, constitute the most common cause of morbidity, hospitalization, and cost in patients with end-stage renal disease. An organized monitoring approach that includes regular assessment of the clinical parameters of the access and of the adequacy of the dialysis should be implemented in every dialysis center. Such a proactive approach can be expected to reduce the incidence of thrombosis and increase potency. Data should be tabulated and tracked within each dialysis center as part of a quality assurance/continuous quality improvement (QA/CQI) program. Cannulation of the central veins can also be carried out under ultrasonographic guidance. In fact, the NKF-DQI committee recommends routine real-time ultrason-guided insertion to reduce insertion-related complications. Peritoneal access: In fact, despite the development of new insertion techniques and the availability of increasingly sophisticated catheters, the most important prognostic factor remains the quality of the surgical procedure and the postoperative care and continuous education at the same time dialysis sessions.


Summary. The objective is to examine the chemical composition of urinary stones in patients with chronic calculus pyelonephritis who live in Varna region. For its implementation, 584 patients with nephrolithiasis from Varna region have been investigated. These patients have been treated in the University Hospital “St. Marina” – Varna, with a primary or concomitant clinically and laboratory confirmed diagnosis calculus pyelonephritis for a period of six years. The chemical composition of stones is determined by the test Urinary calculi analysis-MERCK. It is found that 75% of kidney stones have a mixed composition, 12% are pure uric acid stones, 7% are pure oxalate stones and 6% are phosphate stones. Medical treatment according to the chemical composition of stones is very important in order to avoid repeated invasive procedures and surgical interventions. This is absolutely necessary for the good prognosis of calculous pyelonephritis.

Key words: calculous pyelonephritis, urinary stones – chemical composition

Резюме: Целта на изследването е да се проучи необходимостта от получаване на допълнителна информация за заболеването, здравните грижи, лечението и т.н. за пациентите на хемодиализно лечение, посещаващи Центъра по хемодиализа към УМБАЛ "Св. Марина" ЕАД – Варна. Половината от анкетираните категорично смятат, че им е необходима допълнителна информация, касаеща здравословния проблем на тях или на техните близки. По-малко от половината не възразяват да получат нова такава, а една малка част от респондентните категорично смятат, че допълнителни здравни знания не са им необходими.

Независимо от това, една голяма част от анкетираните пациенти и придвижителите желат да научат какво точно правят за заболяването, как действат грижите, лечението, алтернативните методи на лечение, процедурите, дори за трансплантационните възможности по заселване в здравен проблем. В България близо 2500 болни са на хемодиализа. За да се подобри състоянието в това отношение, е необходимо обединяване на усилията на всички здравеопазвански сектори и пациентско семейство. Пациентите, които са по-добре информирани за заболяването, прояви на болестта, необходимостта от снабдяване на дейности, регламенти и т.н., показват значително по-добри резултати в борбата със заболяването. Затова е необходимо задоволяване на нуждите от ползата в тази насока на пациента и близките му.

Ключови думи: здравна информация, пациент, хемодиализно лечение

Summary: Objective – to investigate the need to obtain additional information about the disease, care, treatment, etc. for patients on hemodialysis and their families visiting the Center of hemodialysis at the University Hospital “Sv. Marina” – Varna. A half of the respondents strongly believe that they need additional information regarding their or their relatives’ health problems. Less than a half do not object to get a new one, but a small proportion of respondents believe that they need no further medical knowledge they need. However, a significant proportion of respondents patients are willing to travel and learn something new, especially for the disease, hygiene care, diet, treatment, alternative treatments, prognosis, even for possibilities of transplantation. In Bulgaria, nearly 2500 patients are on hemodialysis. To improve the statistics in this aspect, the synergistic efforts of the team doctor – nurse – patient – family are needed. Patients who are better informed are the disease, care, need to comply with a diet regimen, etc., show significantly better results in fighting the disease. It is necessary to meet the needs of knowledge of the patients and their relatives.

Key words: health information, patient, hemodialysis


Резюме.

Значим и неоспорим факт е, че хроничните бъбречни заболявания са важен медицински и социален проблем в световен мащаб. При пациентите с ХБН- хронична бъбречна недостатъчност травмеращо са редица моменти, свързани с чисто физическите страдания, наложени от спецификата на основното заболяване. Продължаващото с години диализно лечение, обстоятелството, че болният е зависим от: апаратура, спазването на строго определен режим, ограничават в значителна степен личната му свобода, социалните контакти и сериозно смущават професионалната му реализация. В резултат на това у пациента възникват прояви на стрес, тревожност, изразяващи се в неблагоприятен ефект върху целите лечебен процес, на адаптацията, емоциите и качеството му на живот.
Abstract.
It is a significant and indubitable fact that chronic kidney diseases constitute a severe medical and social issue across the entire world. Patients with CKD – chronic kidney disease, have to endure a number of traumatizing events, associated with the purely physical discomforts brought upon by the disease. The year-long dialysis treatment, the fact that the patient is reliant on equipment and a strict therapeutic regimen greatly inhibit said patient’s personal liberty and their social contact opportunities, in addition to impeding their career advancement. As a result the patient develops signs of stress and anxiety which have an overall negative effect on the healing process, on adaptation, on emotions, and the quality of life.

The goal of this study is to determine the presence of a series of psychologically stressful and anxiety-indicing events in the lives of CKD patients on chroniodialysis(CHD).

Key words: dialysis, anxiety, chronic renal failure, stress
Целта на настоящия обзор е да представи и проследи в динамика етиологията, диагнозата и лечението на уроинфекции в напреднала и старческа възраст.

Ключови думи: уринарна инфекция, микроорганизми, бъбречни заболявания, безсимптомна бактериурия

Abstract.

With age infections of the urinary tract and the asymptomatic bacteriuria become more often in both genders. Ascending path of the infection dominates in elderly patients. Very important factor is the weakening of the protective mechanisms due to the changes in the glomerules and the tubular interstitial system of the kidney. Typical symptoms of the infection of the upper urinary tract may be missing.

Key words: urinary infections, microorganisms, kidney diseases, asymptomatic bacteriuria

Резюме. Болните с хронични заболявания не рядко изпадат в състояние на депресия и отчаяние, като това не само съпътства основното заболяване, но и създава редица трудности, усложняващи адаптацията и лечението на основния лечебен процес. Медицината е разчитала твърде много на мистичната сила на лекарите и на вярата на пациентите в техните способности да надделяят над болестта. При пациентите на диализа диализно лечение и комуникация с медицински персонал, както и реализацията в социалния живот се приема индивидуално. За по-добро качество на живот на хронично болни пациенти до голяма степен има значение не само терапевтичната намеса, но и въздействието върху емоционалното им състояние с методите на психотерапията. Процесът на приемане и адаптиране към новия начин на живот наложен от болестта е труден и продължителен.

Ключови думи: диализа, адаптация, хронична бъбречна недостатъчност, качество на живот
Abstract. Chronic disease patients often succumb to a state of depression and desperation, which not only accompanies the primary condition, but also creates a number of difficulties for the treatment and adaptation processes. Medicine has been all too dependant on the mystical power of doctors and the patients’ faith in their capacity to overcome disease. For dialysis patients the actual dialysis treatment, the communication with the medical staff, and the fulfillment of their social life are all factors rationalized individually. To improve the quality of life of the chronically ill one must focus not only on the therapeutic intervention, but also on impacting their emotional state with the methods of psychotherapy. The process of acceptance and adaptation to their new way of life imposed by the illness is difficult and lengthy.

Key words: dialysis, adaptation period, chronic renal failure, quality of life
The creation and maintenance of functioning vascular access, along with the associated complications, constitute the most common cause of morbidity, hospitalization, and cost in patients with end-stage renal disease. An organized monitoring approach that includes regular assessment of the clinical parameters of the access and of the adequacy of the dialyses should be implemented in every dialysis center. Such a proactive approach can be expected to reduce the incidence of thrombosis and increase patency. Data should be tabulated and tracked within each dialysis center as part of a quality assurance/continuous quality improvement (QA/CQI) program. Cannulation of the central veins can also be carried out under ultrasonographic guidance. In fact, the NFK-DOQI committee recommends routine real-time ultrasound-guided insertion to reduce insertion-related complications.

**Key words:** Vascular Access Device, Arteriovenous Fistulas, Percutaneous Catheters, Peritoneal Access

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A22. Стайкова, Св., Renagel – оптимален и бърз ефект при лечение на хиперфосфатемия при диализно болни. Специализирано издание за лекари – MD, бр. 8, 2012 (с репринт)

Хиперфосфатемията е важен, самостоятелен рисков фактор за високата сърдечносъдовата болестност и усложнения при пациенти с хронична бъбречна недостатъчност (ХБН) на диализа (Фиг. 1).

Много често нарушеният минерален метаболизъм при диализно болни води до инвалидизация и повишен смъртност. Това се дължи на болката, загубата на костно вещество, повишен риск за костни фрактури и анемията.

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Резюме. Нарушенията на минералния метаболизъм при пациентите с напреднала хронична бъбречна недостатъчност (ХБН) и терминална бъбречна недостатъчност водят до инвалидизация и повишен смъртност. Хиперфосфатемията е самостоятелен рисков фактор за изключително високата сърдечно съдова болестност при болните с ХБН. Костно-минералното заболяване при пациентите с ХБН се проявява с нарушен
Abstract. The disorders in the mineral metabolism in patients with advanced CRD and terminal renal insufficiency lead to invalidization and death. The hyperphosphatemia is independent risk factor for extremely high cardio-vascular pathology in patients with chronic kidney disease (CKD). The bone-mineral illness in patients with CKD manifests with disbalanced bone metabolism with specific biochemical changes connected with the different Calcium-Phosphorus product, proteins and hormones.

The target of this publication is to present that Renagel is mean of controlling the hyperphosphatemia in patients on haemodialysis or peritoneal dialysis as a part of a complexed therapeutical approach which can include calcium supplements, 1,25-dihydroxyvitamin D3 or one of its analogs for monitoring of the advancement of the renal bone disease.

Key words: renal bone disease, dialysis, hyperphosphatemia, chronic kidney disease.
Abstract. Diabetes mellitus is one of the leading socially significant diseases, ranking third in frequency after cardiovascular and oncological conditions. In the last years there has been a steady increase in the number of diabetics requiring dialysis.

Diabetes mellitus is a chronic disease affecting quality of life, which results in fear, anxiety, and depression. Not unexpectedly, when coupled with depression, diabetes presents a very formidable therapeutic challenge.

One in five diabetics suffers from depression at some point in their life – this affects women twice as often as men. Taking into consideration the psychological and behavioral correlation between diabetes and depression, as well as the states of anxiety and fear that accompany these conditions, one can safely state that, in conjunction, these conditions become progressively more difficult to manage and greatly speed up the manifestation of complications.

Key words: diabetes mellitus, depression, dialysis, chronic renal failure, anxiety
Creating and sustaining an effective and functional vascular access, together with successful overcoming the frequent complications connected with it make even larger the collaboration between the medical specialists, undertaking the hospitalization, clinical manifestation and the treatment of the patients with CKD. Organizing check-up examinations with adequate evaluation and monitoring the clinical settings of the vascular access and the quality of the dialysis should be standardized in all dialysis centers. With this active approach and care a lower rate of thrombosis and achieving better results can be expected.

133 patients with CKD are analyzed of which 20% are on dialysis through permanent tunneled catheter and the rest-through A-V fistula. The problems connected with the vascular access remain hard to solve and give reason for accepting and executing a clear practical doctrine, creating a better perspective in the dialyses centers in Bulgaria.

Key words: vascular access, PermCath, percutaneous venous catheterisation, dialysis

Abstract:

Създаването и поддържането на ефективен и функциониращ съдов достъп, заедно с успешното овладяване на честите компликации, произтичащи от това, учредяват все по-голяма колаборация на медицинските специалисти ангажирани с морбидитета, хоспитализацията и лечението на болните с ХБН. Организирането на контролните прегледи, включващи правилна оценка и мониториране на клиничните параметри на съдовия достъп и качеството на диализата трябва да бъде регламентирано във всички диализни центрове. При този активен подход и грижи може да се очаква по-ниска честота на тромбозите на и постигането на добри резултати.

Резюме:

Ключови думи: хронична бъбречна недостатъчност, съдов достъп, PermCath, диализа.
Analyzing 138 patients with CRD, of which 21% are dialyzed through a permanent tunneled catheter, and the rest through A-V fistula. The problems related to vascular access are difficult to solve and give cause for accepting and executing a clear practical doctrine, creating a better perspective for dialysis patients in Bulgaria.

Key words: vascular access, PermCath, percutaneous venous catheterisation, dialysis

Abstract:

Creating and sustaining an effective and functional vascular access, together with successful overcoming the frequent complications connected with it make even larger the collaboration between the medical specialists undertaking the hospitalization, clinical manifestation and the treatment of the patients with CRD. Organizing check-up examinations with adequate evaluation and monitoring the clinical settings of the vascular access and the quality of the dialysis should be standardized in all dialysis centers. With this active approach and care a lower rate of thrombosis and achieving better results can be expected.

138 patients with CRD are analyzed of which 21% are on dialysis through permanent tunneled catheter and the rest through A-V fistula. The problems connected with the vascular access remain hard to solve and give reason for accepting and executing a clear practical doctrine, creating a better perspective in the dialyses centers in Bulgaria.

Key words: vascular access, PermCath, percutaneous venous catheterisation, dialysis


Abstract.

All chronically ill, more specifically – those with chronic renal failure, come to face not only the specific physical aspect of their condition, but also the psychological distress which follows the realization of the disease’s progression and serious prognosis.

A study conducted among 50 patients (30 men and 20 women) from the hemodialysis centers of the cities of Varna and Targovishte established that they are faced with numerous stressful situations at the start of their dialysis treatment.
The sometimes life-long dialysis therapy, the added anxiety of knowing one’s complete reliance on equipment and a specific dialysis routine all contribute to limiting the patients’ personal freedom and putting them in stressful situations.

**Key words:** stress, hemodialysis, chronic renal failure

A28. Стайкова, Св., К. Ненов, А. Капреян. Плазмафереза в комплексното лечение на myasthenia gravis. сп. Актуална нефрология, 2013

Резюме:

*Myasthenia gravis is a result of abnormal immune reaction on nervous-muscular transmission due to genetic anomalies. Diagnosis is difficult and time-consuming, at times taking up months and even years. Treatment includes primarily acetylcholine inhibitors, corticosteroids, immunosuppressors.*

**Keywords:** plasmapheresis, myasthenia gravis


Резюме

Класическият признак за клинично сигнификантен vascular steal syndrome (VSS) е отсъствието или отслабването на периферните пулсации на крайника. Ихемията, обикновено е нискостепенна, характеризираща се с хипотермия, схващане и болки в крайника по време на диализа.

Целта на лечението е да редуцира VSS до ниво, допускащо достатъчен циркулаторен и дебит за диализа и да се осигури адекватна перфузия на крайника, елиминираща периферните ихемични симптоми.

Диференциалната диагноза на VSS включва разграничаване от диабетна или уремична невропатия, вторичен хиперпаратиреоидизъм и Carpal tunnel syndrome.

Електромиографията и ангиографията са „златен стандарт“ за доказване или отхвърляне на диагнозата.

**Ключови думи:** артерио-венозна фистула, диализа, vascular steal syndrome
Abstract

The classical sign for clinically significant vascular steal syndrome (VSS) is absent or weak peripheral pulsations of the limb. The ischemia is usually low rate, characterized with hypothermia, cramps and pain in the limb during dialysis.

The goal of the treatment is to reduce the VSS to a level allowing adequate blood flow for the dialysis and to ensure adequate perfusion to the limb, eliminating the peripheral ischemic symptoms.

The differential diagnosis of VSS includes distinguishing it from diabetic or uremic neuropathy, secondary hyperparathyroidism and carpal tunnel syndrome.

Electromyography and angiography are the „gold standard“ for rejecting or confirming the diagnosis.

Keywords: treatment, ischemia, diagnosis.

Abstract

The treatment with plasma exchange (PE) is executed with success in more than 110 different illnesses but the effect has been proved in about 30 of them. The method is mostly
applied in neurological, nephrological and rheumatological diseases. It shows excellent results in hyperviscosity conditions, a number of intoxications and complicated immunosuppressive therapy protocols.

The goal of the research is to analyse the clinical effect of using plasmaexchane in 81 patients with nephrological disease in the Clinic of Dialysis, UMBAL “St. Marina”, Varna.

With PE is achieved immunomodulation, influencing actively the immunologic condition and slowing the progression of the kidney insufficiency.

PE has excellent effect added in the treatment in a complex approach in patients with severe immune kidney diseases.

**Keywords:** immunosuppressive thrapy, kidney insufficiency, complex treatment

А31. Стайкова, Св., А. Стоянов, К. Ненов. Анализ на микробиологичната находка и оценка на резултатите от антибиотичното лечение при пациенти на перитонеална диализа с перитонит. Специализиране, 2013, под печат

Резюме

Клиничното приложение на перитонеалната диализа за пръв път е описано през 1923 г. Основното предимство на метода е значителната независимост на пациента при провеждане на диализните сеанси, поради това, че може сам в домашни условия осъществява процедурата.

Перитонитът се явява най-честото усложнение на континуирана амбулаторна перитонеална диализа (CAPD) като повлиява преживяемостта на пациента и на самия метод.

Целта на настоящото проучване е да се направи анализ на микробиологичната находка при пациентите на CAPD с перитонит и оценка на резултатите от проведеното антибиотично лечение.

Според микробиологичните изследвания най-честите причинители на перитонита са: Staph aureus, E. coli, CNS.

Перитонитът е причина за смърт при 3 - 13 % от пациентите провеждащи перитонеална диализа.
Abstract

The clinical application of peritoneal dialysis is for the first time described in 1923. The basic advantage of this method is the substantial independence of the patient in the executing of the dialysis due to the fact it could be done at domestic environment.

The peritonitis is the most common unwanted consequence of the continued ambulatory peritoneal dialysis (CAPD) which affects the survival of the patient and the method itself.

The goal of this research is to analyze the microbiological find of the patients on CAPD with peritonitis and evaluate the result of the conducted antibotical treatment.

According to recent microbiological researches the most common causers of peritonitis are: Staph.aureus, E.coli, CNS.

Peritonitis is the cause of death in 3-13% of the patients on peritoneal dialysis.

Key words: peritonitis, continued ambulatory peritoneal dialysis, chronic kidney disease
ABSTRACT
The stress at work is a result and consequence of a lot of stress factors. The goal of this research is to determine the rate of stress in the dialysis centers and the influence over personnel-patient relationships.

The patients dependence of the apparatus, the strict hospital regime, the limited personal freedom and independence put the patient in a very large number of stress situations. The everyday meeting with the suffering and the problems of the patients, the burden of sickness, the dynamic and the large psychological and physical tension in the work environment are demotivating and powerful stress factors, having unfavorable effect over the medical personnel. The tension and the dynamic situations are connected most often with the specific activity of the dialysis center (noise, long shifts) and the appearance of interpersonal conflicts. Patients on dialysis for years are extremely critical, emotional, selfish.

KEY WORDS: stress, dialysis patient, stress factors.

Монографии

F1. Св. Стайкова. Съвременен алгоритъм за съдов и перитонеален достъп за диализа., 2013

Предговор
Уважаеми читатели,
Настоящата монография представлява второ преработено и допълнено издание към Трансатлантически консенсус, приет през 2001 г. През 2002 г. е разработен от Dr Bernard Montreuil, M.D. – Университетска болница Роземонт, Медицински факултет, Монреал, Канада, под оригиналното заглавие „Vascular and Peritoneal Access: Introduction“. Този научен труд разглежда проблемите на съдовия и перитонеален достъп при диализа. Вярвам, че богато илюстрираният и достъpen текст, допълнен с литературни източници, ще допринесе за по-голям интерес на читателите. Утвърдените в монографията консенсусни становища могат да послужат като основа за добрата клинична практика в областта на нефрологията и съдовата хирургия.
Надявам се, че монографията ще помогне за по-добра и бърза ориентация при вземане на правилните и точни решения в диференциално-диагнозичен план на базата на съвременните алгоритми при лечението на диализно болни.

От автора

F2. Б. Монтрьоил, Св. Стайкова, Б. Денчев. Съдов и перитонеален достъп за диализа – ТАСК критерии. Монография с международно участие, 2006

УВОД:
Материалът, публикуван в този научен труд е създаден на базата на доклад, съдържащ клиничните и практически указания за всички видове достъпи за диализа. Цитираният доклад е актуализиран през 2001г. и е приет като
Transatlantic consensus. In 2002, it was developed by Dr Bernard Montreuil, M.D. under the original title “Vascular and Peritoneal Access: Introduction”. In 2004, the chapter was officially released and distributed on an electronic carrier on the internet. In 2006, with regulated author rights for Bulgaria, the material was modified, analyzed, and developed in the current version by Dr Svetla Vasileva Stoykova, D.M., and Dr Borisлав Атанасов Денчев. Edited by Dr Georgi Petrov Stefanov.