

Posters



2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

A systematic review and meta-analysis of nursing interventions in patients with chronic diseases

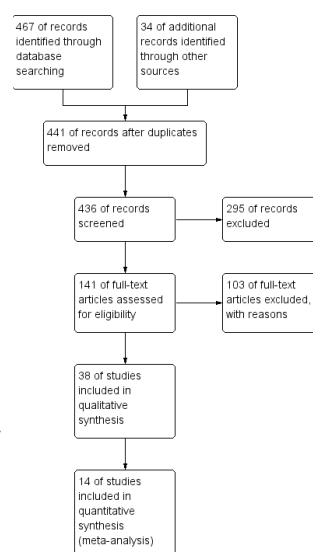
Francisco José Amo Setién¹, Roberto Martín Melón¹, Laura Ruiz Azcona¹, Angela Fernández Rodríguez¹, Rebeca Abajas Bustillo¹, Blanca Torres Manrique¹, Carmen Sarabia Cobo¹, Jesús Molina Mula², Rosario Fernández Peña¹, Silvia González Gómez³, María Jesús Durá Ros¹, Gloria de Alfonso Blanes¹, Tamara Silió García¹ and Carmen Ortego Maté¹

¹University of Cantabria, Spain

²University of Balearic Islands, Spain

³Cantabrian Health Service, Cantabria, Spain

Nurses often perform interventions aimed at improving the Health-Related Quality of Life (HRQOL) in patients with chronic diseases. However, the amount of information generated, sometimes contradictory, makes it difficult to interpret the results. This systematic review allows empirical evidence to be summarized. Thus, the purpose of this study is to determine, through a systematic review and a meta-analysis, the characteristics of the nursing interventions, performed in people/patients over 18 years old with chronic diseases, which involve an improvement in their HRQOL. A literature search was performed in six electronic databases (PubMed, Scopus, WOS, CINAHL, Web of Science and Cochran) from September until December 2017. Also, bibliographies of relevant papers and publications were hand searched. Randomized Controlled Trials (RCTs) and cluster-RCTs, with at least two groups of patients in which a nurse was involved. Two authors independently reviewed studies for inclusion, extracted data, and assessed study quality with discrepancies being solved through discussion. In the meta-analysis, Effect Sizes (ESs) were calculated for each outcome by calculating the standardized mean change for each sample. This systematic review synthesizes data from 38 studies, published between 2003 and 2015, that provided a sample of 6480 people with a mean age of 68.4 years (SD=8.7). In 60.6% of the interventions a single component was used, being education the one most commonly used. 72.5% of the interventions were not based on a theory. The duration of the interventions ranged from 4-104 weeks, with a mean of 12 sessions and 54.2 minutes/session. SF-36 questionnaire was the most often used to evaluate HRQOL. After the intervention, most of the studies showed a slight HRQOL improvement (ES=0.1) in the intervention group. It can be concluded that nurses' interventions had a little, but significant beneficial effect on HRQOL.



Biography

Francisco José Amo Setién has received PhD in Health Sciences from University of Cantabria in 2017, an inter-university Master's degree in "Genetic, nutritional and environmental conditioning factors of growth and development" (UC) and a Nursing degree (UC). He has gained research experience in the field of nutrition, obesity in children and adolescents with intellectual disabilities, as well as in health related quality of life in patients with chronic diseases and he has been a full-time Teaching Assistant in the area of community health in the Nursing Department of the University of Cantabria since 2014.

franciscojose.amo@unican.es

Notes:

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

The chronic complex patient in Cantabria and Balearic Island (Spain). An Observational Study

Francisco José Amo Setién¹, Encarnación Bustamante Cruz², Aroa Delgado Uría², María González Quintana², Héctor Fernández-Llaca López², Catalina Pérez Palomares², Silvia Gómez Fernández², Yolanda Ortega Montes², Lorena de Carlos Negro², María Cifrián Martínez², María Lanza Martínez², Nerea Rentería López², Julia Gallo Estrada³, Abraham Delgado Diego², Carmen Ortego Maté¹

¹RN PhD, Nursing Department, University of Cantabria, Spain

²RN, Servicio Cántabro de Salud, Spain

³RN PhD, Nursing Department, University of Balearic Islands, Spain

Background: Chronicity management is the greatest challenge that the Spanish national health system faces, having to invest 80% of health expenditure to deal with this problem. Complex Chronic Patients (CCPs) are those patients in with several chronic pathologies coexist with frequent de-compensation and high risk of functional loss. CCPs represent between 3-5% of the Spanish population and consume a high percentage of the resources.

Objective: To describe the level of dependence and cognitive impairment experienced by chronic complex patients in the urban area of Santander (Cantabria) and Palma (Balearic Islands).

Methods: A multicenter, cross-sectional study involving over 18 year old CCPs located at 3-4 level of the risk pyramid in the care model to chronicity. They are located in the urban area of Primary Care in Santander (Cantabria) and Palma (Balearic Islands). Barthel Index was used to assess dependence and cognitive deterioration was assessed through the Pfeiffer test.

Results: 20 health centers from Santander (n=2885) and 16 from Palma (n=1631) participated in the study. The average age of the selected chronic patients was 77 years (SD=12.3). 27.4% presented moderate, severe or total dependence and 23.6% moderate or significant cognitive impairment. A linear relationship was observed between the scores in the Pfeiffer test and the Barthel index ($r=-0.47$, $p<0.001$). The hospital admission rate correlated with the score in the Pfeiffer test ($r=0.2$, $p<0.001$) and in the Barthel index ($r=-0.19$, $p<0.001$).

Conclusion: Age, dependency level, cognitive deterioration and hospital admission rate are intimately related in complex chronic patients. Therefore, it is important to continue promoting care models aimed at reducing dependency.

Biography

Francisco José Amo Setién has received PhD in Health Sciences from University of Cantabria in 2017, an inter-university Master's degree in "Genetic, nutritional and environmental conditioning factors of growth and development" (UC) and a Nursing degree (UC). He has gained research experience in the field of nutrition, obesity in children and adolescents with intellectual disabilities, as well as in health related quality of life in patients with chronic diseases and he has been a full-time Teaching Assistant in the area of community health in the Nursing Department of the University of Cantabria since 2014.

franciscojose.amo@unican.es

Notes:

Table 1. Categorized scores. Index of Barthel and Pfeiffer

Questionnaires	Categories	n _{global}	%	Palma		Santander		p ^a
				n	%	n	%	
Barthel Index	Independent	700	27,67	211	14,77	489	44,41	0,000
	Mild Dependence	1138	44,98	696	48,71	442	40,15	
	Moderate dependence	314	12,41	240	16,79	74	6,72	
	Severe dependence	170	6,72	129	9,03	41	3,72	
	Total dependence	208	8,22	153	10,71	55	5,00	
Pfeiffer Test	Normal	1086	62,85	495	46,74	591	88,34	0,000
	Mild	235	13,60	193	18,22	42	6,28	
	Moderate	216	12,50	195	18,41	21	3,14	
	Severe	191	11,05	176	16,62	15	2,24	

^aChi squared

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Clinical implication of serial neurophysiologic study in diagnosis of chemotherapy induced peripheral neuropathy

Sang Hee Im¹ and Eun Young Han²

¹Severance Hospital-Yonsei University, South Korea

²Jeju National University, South Korea

Background & Objective: Taxane families are widely used in the management of patients with breast and ovarian cancers. Dose-limiting toxicity of taxanes is related to a distal sensory neuropathy, with symptoms of sensory loss and paresthesia in the extremities that can significantly impact quality of life in cancer survivors. However, the assessment of Chemotherapy Induced Peripheral Neuropathy (CIPN) is still based not on the objective findings of neurophysiologic study, but on clinical symptoms. Therefore, the aim of this retrospective study is to demonstrate neurophysiologic changes in symptomatic subjects and to compare clinical symptoms and neurophysiologic findings and to reveal the feasibility of neurophysiologic study.

Methods: The medical charts of subjects with breast or ovarian cancers who visited university hospital between April 1, 2017 and January 1, 2018 were reviewed. Inclusion criteria were history of chemotherapy with taxane-containing regimen, sensory symptoms of glove and stocking distribution compatible with neuropathic pain (those with Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) Pain Scale ≥ 12) and those who had undergone Nerve Conduction Study (NCS) twice during or after the chemotherapy. Subjects were excluded if they had predisposing condition for neuropathy such as diabetes mellitus, thyroid disease, alcohol abuse history and previous chemotherapy for other malignancies. Demographics and clinical features were acquired along with parameters of body mass index, body surface area, the regimen and the number of chemotherapy, LANSS Pain Scale, and the Sensory Nerve Action Potentials (SNAPs) recorded in the sural nerves.

Results: Data from 23 subjects were collected. Baseline characteristics are described. All subjects scored over 12 in LANSS Pain Scale, subjectively having symptoms compatible with neuropathic pain. Follow-up NCS was performed after 2.2 months on average. In the follow up study, sural SNAP amplitudes were significantly reduced compared with the first study. Among subjects who suffers from neuropathic pain after taxane-containing chemotherapy, only 10 out of 23 (43.5%) showed sural SNAP amplitude lower than 10 μ v in initial NCS. Additional five subjects developed sural SNAP amplitude lower than 10 μ v in the follow-up NCS (15 out of 23, 65.2%). Between the first and second NCS, 10 subjects showed more than 30% drop of sural SNAP amplitude (10 out of 23, 43.5%).

Conclusion: Considering the evidence of axonal injury in the sural nerve, maximum of 65.2% patients was determined as CIPN. However, including the subjects with more than 30% drop of sural SNAP amplitude, serial NCS results could support as much as 78.2%. Therefore, serial NCS studies during chemotherapy may be helpful in assessing the chemotherapy induced nerve damage and to attain the objective evidence of CIPN. Further study is needed to establish the proper timing of the follow up NCS study.

Biography

Sang Hee IM is a Clinical Associate Professor in Yonsei University College of Medicine, Seoul, S. Korea. She is specialized in Cancer rehabilitation, Lymphedema, Musculoskeletal pain, Dysphagia. She completed her Bachelor of Medicine in Kwandong University College of Medicine, Master of Medicine and Doctor of Medicine in Yonsei University College of Medicine, Seoul, Korea. Her previous experience, Assistant Professor in Catholic Kwandong University College of Medicine and in Jeju National University School of Medicine, Director in Regional CardioCerebroVascular Center, Jeju National University, Jeju, S. Korea.

dongin32@naver.com

Notes:

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Effects of nutrition on epidermolysis bullosa acquisita

Anne Braun, Christian D. Sadik

Department of Dermatology, University of Luebeck, Luebeck, Germany

Statement of the Problem: Epidermolysis bullosa acquisita (EBA) belongs to the group of pemphigoid diseases, a family of chronic-remitting autoimmune skin blistering diseases (ASBD). These diseases are hard to treat with no specific medication available and are associated with an increased mortality rate. **Methodology & Theoretical Orientation:** In the last years, the gut microbiota has been shown to affect the immune system systemically. Disease severity of murine models of e.g. rheumatoid arthritis and gout can be modulated by treatment with acetate, a short chain fatty acid (SCFA) and main microbial fermentation product of dietary fibers. The production of microbial products, modulating immunity, is determined by the composition of the gut microbiota, which is largely effected by nutrition. Nutrition can also directly modulate the immune system, for example by polyunsaturated fatty acids (PUFA). Plasma levels of lipid mediators, known to modulate the immune system, are metabolites of PUFAs, which are components of fish oil. Dietary fish oil supplementation can increase serum PUFA levels. So far, the effects of nutrition and the gut microbiota on ASBDs were unknown. We therefore tested different diets and supplements in an antibody-transfer-induced EBA mouse model. **Findings:** We could show that neither a high fat nor a fish oil rich diet effect EBA disease severity. The same is true for a fiber-rich diet as well as oral treatment with the short chain fatty acids acetate, propionate or butyrate. Also, depletion of the gut microbiota using an antibiotic-cocktail does not affect disease severity. **Conclusion & Significance:** Nutrition does not seem to have a major impact on EBA disease progression in a mouse model of EBA.

Biography

Anne Braun is currently working on her PhD thesis studying the effects of nutrition on an autoimmune disease. She obtained her Master of Science in Molecular Life Science at the University of Lübeck, Germany, in 2015.

anne.braun@uksh.de

Notes:



e-Poster



2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Linkage to a new locus on chromosome 6 in an Iranian pedigree diagnosed with Early Onset Parkinson's disease (EOPD)

Afagh Alavi^a, Elham Ghorbanpour^b, Moohebat Pourmajidian^c, Elahe Elahi^{c,d}, Gholamali Shahidi^e

^aGenetics research center, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

^bDepartment of Clinical Biochemistry, Faculty of Medicine, Tehran University of Medical Sciences, Tehran, Iran

^cDepartment of Biotechnology, College of Science, University of Tehran, Tehran, Iran

^dSchool of Biology, College of Science, University of Tehran, Tehran, Iran

^eDepartment of Neurology, Iran University of Medical Sciences, Tehran, Iran

Statement of the problem: Parkinson's disease-(PD) is a common neurodegenerative disorder characterized by motor (resting tremor, bradykinesia, and rigidity) and nonmotor features. The incidence of PD increases with age. Five principal genes have been identified for this condition, naming: *SNCA*, *LRRK2*, *PRKN*, *PINK1*, and *DJ-1*. Mutations in these genes account for the disease in a few percent of patients, suggesting other PD-causing genes remain to be identified.

The purpose: To identify the potential genes responsible for PD in a highly consanguineous Iranian family, showing no deleterious mutation in any of the previously identified genes. Age-at-onset of symptoms was in the second decade of life, and the inheritance was autosomal recessive.

Methodology: Genotyping was performed in unaffected parents, two unaffected and two affected siblings. Exome sequencing was done on two affected and two unaffected siblings. Homozygous regions common to all affected and absent in non-affected were sought. Preliminary filtering of sequence variations was done to identify all (nonsynonymous, stopgain, stoploss, deletion, and insertion) homozygous changes present in both affected that were absent in unaffected siblings in homozygous state and were positioned within the locus identified by homozygosity mapping. Subsequently, variations with a reported MAF<0.01 in public databases were removed to finally find the disease-causing variations.

Findings: The disease status in the family was linked to a large homozygous region (15Mb) on chromosome-6, containing 130 genes. The filtering criteria used for WES revealed seven variations that had been located in the homozygous region. One of these variants segregated with the disease status in the family and was not detected in 500 Iranian healthy controls. Our ongoing functional studies on the candidate gene suggest a promotion in apoptosis upon overexpression of this gene in Hela cells. Conclusion and significance: Our finding can provide insight into the etiology of dopaminergic neuronal death in the midbrain as the principal hallmark of Parkinson's disease.

Biography

Afagh Alavi has completed her M.Sc. and Ph.D. studies at the University of Tehran. She is currently an assistant professor in the University of Social Welfare and Rehabilitation Sciences in Iran. Her research field is the genetic of neuromuscular disorders. She has published more than 17 papers in reputed journals.

afaghalavi@gmail.com

Notes:

Accepted Abstracts



2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

A functional study to relate the prevalence of *H. pylori* infection to starch rich diet on the island of St. Vincent and the Grenadines

Daphne Santhosh, Melissa Brown, Taslima Jaby and Maurissa Harris
Saint James School of Medicine, Caribbean

Helicobacter pylori is an important risk factor for gastritis and gastric carcinoma. It is a Gram-negative, flagellated, motile bacterium that adapts well to the acidic gastric environment by elucidating the enzyme urease which neutralizes the gastric pH, allowing the bacterium to adhere to the gastric mucosa causing infection and inflammation leading to peptic ulcers. However, other important factors are thought to be responsible, such as diet, and familial genetic predisposition. A study by Mard et al. in 2014 showed adequate nutritional status, especially high consumption of fruits, vegetables, and vitamins appear to protect against the pathological consequences of *H. pylori* infection. The aim of our study was to evaluate the association of dietary consumption of starch rich diet common to the island of St. Vincent and the Grenadines to *H. pylori*. This was a cross-sectional study conducted between January and March of 2017. Dietary consumption of participants was assessed using food frequency questionnaire approved by the institutional research committee (IRC) of St. James School of Medicine along with informed/ signed consent from 200 willing participants. *H. pylori* infection status was diagnosed using the one-step *H. pylori* blood test kit. Among a sample size of 200 (n=200); 14.5% were positive for *H. pylori* infection while 85.5% were negative. The data among the 14.5% were statistically insignificant between the sexes (males=16%) and (females=13%) ($p>0.05$). Among the eight variables, family history and incidence of *H. pylori* was in accordance with established data with 33% showing positive with family history vs. 13% without; with a statistically significant data ($p=0.031$). A higher trend was noticed for complex carbohydrate consumption in *H. pylori* infected individuals but the data was statistically insignificant ($p=0.63$); but a larger sample size would have benefited the research towards the hypothesis. Among the food groups; starch, protein and vegetables were of higher consumption than other food groups but the data was statistically insignificant ($p=0.61$).

dsanthosh@mail.sjmsm.org

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Complication of MRC UKALL X protocol in pediatric acute lymphoblastic leukemia: A retrospective analysis

Ehsan Shahverdi^{1,2}, Mohammad Ali Ehsani³, Farzaneh Tavakoli⁴, Mohammadreza Mohamadimaram⁴, Fatemeh Feizi⁴, Peyman Salamati³ and Alireza Lotfipour³

¹High Institute for Research and Education in Transfusion Medicine, Iran

²MAHAK Pediatric Cancer Treatment and Research Center, Iran

³Tehran University of Medical Sciences, Iran

⁴Shahid Beheshti University of Medical Sciences, Iran

Background & Aim: Leukemia has the highest incidence in pediatric malignancy and ALL is the most common. In the recent years, treatment has been remarkably improved and now most of the patients are cured successfully. UKALL-X is a protocol with 1 or 2 consolidation therapy phase regarding to the patient's conditions. The aim of this study was to investigate the response to therapeutic procedure and complications related to consolidation therapy phase in this protocol.

Material & Methods: In this retrospective cross sectional study, ALL patients from 2008 to 2015 in Bahrami Pediatric Hospital, Iran were enrolled. Patients' demographic information and clinical characteristics, including age, gender, ALL morphology subtype, WBC and neutrophil counts, Hb level, length of hospitalization and outcome were collected.

Results: 67 ALL patients who were under UKALL-X protocol were enrolled for analyzing. 28 (41.7%) and 19 (28.3%) cases were between 0-5 and 10-15 years old, respectively. 44 patients (65.6%) were boys and 23 cases (34.4%) were girls. 7 patients (10.7%) relapsed in the 3 years of diagnosis. 50 subjects (74.6%) had an overall survival of 3 years. 47% of mortalities occurred in 0-5 years old patients. 45 (67.2%) and 17 (51.5%) of patients were L1 and L2, respectively. Among 33 cases received the first phase of consolidation, 17 patients (51.5%) had experienced neutropenia. Neutropenia happened in 19 patients among 35 cases (54.2%) who received the second line therapy. There was no report of mortality caused by neutropenia subsequent to consolidation. There was no significant association between age and mortality and neither age and incidence of neutropenia subsequent consolidation therapy.

Conclusion: Considering 3 year survival, no mortality report related to consolidation-therapy-induced neutropenia and low percentage of relapse in this study can suggest that this protocol is an appropriate treatment strategy in countries such as Iran.

shahverdi_ehsan@yahoo.com

Notes:

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Progressive exhaustion, experiences of Iranian family caregivers of the patients undergoing hemodialysis: A qualitative study

Kourosh Zarea¹, Shahriar Salehitali² and Fazlolla Ahmadi³

¹Ahvaz Jundishapur University of Medical Sciences, Iran

²Shahrekord University of Medical Sciences, Iran

³Tarbiat Modares University, Iran

Background: Although family caregivers of patients undergoing hemodialysis may experience a considerable burden of care, fewer studies have been carried out on exploring family caregivers' reasons for bearing such a burden, the strategies pursued by them and the quality of the imposed burden of care based on their experiences.

Aim: The main aim of the current study was to discover and describe the burden of care experienced by family caregivers for the patients undergoing hemodialysis.

Design: This study used the qualitative research design approach.

Methods: A content analysis approach was used for data collection and analysis. 15 family caregivers were selected through purposive sampling from 4 medical training centers in the south of Iran. Semi-structured interviews were applied to collect information.

Results: The data analysis resulted in three main themes including care challenges, chronic nature of care and victim of situation, which all consist of related subcategories. The whole of these themes are included in the main category of progressive exhaustion which is experienced by the family caregivers during the care of patients undergoing hemodialysis.

Conclusion: Due to the significant and effective role of caregivers in the patients' care process, the overall health of caregivers should be taken into account; thus, more attention should be paid to their health and the burden of care experienced by them should be monitored to improve their quality of life, social welfare and level of satisfaction.

kourosh1685@gmail.com

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Trans-fat food has more risk to cardiovascular disease than having effects as causative factors of cancer

Ousman Bajinka
Ege University, Turkey

In this generation among the fast killing diseases, cancer is not a small factor. There has been and still intensive study on the occurrences and mechanism of cancer. Due to the fact that there has not been any scientifically proven treatment that specific to the various forms of cancer, the controversies as to what cause this cancers are exponentially high. One of this is the concept of trans-fat containing foods are causing cancer. Trans-fat foods up to date are believed by many that is a causing cancer instead of a risk to cardiovascular diseases. In this review, some concrete facts are further looked into to defeat the idea of trans-fat as carcinogens. Cancer itself is thoroughly explained and types of cancers in relations to the sources of foods that are claimed high risk. The chemistry of saturated and unsaturated fatty acids was also dealt with and foods that are proven to be rather protective to causing cancer are also highlighted. None the less, the reasons why trans-fats were term carcinogens was explained and disproved. Among the review article, there has not any scientific proof as to trans fats as carcinogenic instead a risk to heart diseases and for this, extensive use of these food items are advised to be less consumed.

bajinkaousman@gmail.com

Notes:

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Microbiome and chronic disorders

Reza Nassiri

Michigan State University, USA

The research and clinical interests for microbiota formerly called the normal flora has grown tremendously in the recent years. The large-scale dynamics of the microbiome can be described by many of the tools and observations used in the study and management of chronic disorders. Microbiome and metagenome have important functions in health and disease; their exploration is continuous to better understand human health and genetics, especially the announcement made by the U.S. National Microbiome Initiative. It is now understood that complex microbial communities can influence the pathology chronic diseases, which may have implications for disease diagnosis, management and prognosis. Currently, studies focus on investigations of variant microbiome communities such as cutaneous, gastric, colonic/colorectal, inflammatory bowel diseases, obesity and metabolic disease just to list few. The key in application of microbiome in chronic disorders is the microbial restoration, which is an appropriate extension of the probiotic strategy; the microbial transplantation has received much interest in the recent years aiming at generating intact microbial community in a diseased person. *C. difficile* recurrent infections and microbial restoration is a remarkable example of the application of microbial transplantation. Therefore, it appears the future of microbiome therapeutic modalities is a targeted approach which may become embedded in the precision management chronic disorders. Such an approach relies on host factors that may influence the overall individual health as well as response to treatment modalities (e.g., microbial restoration). However, another key factor to such a response is host genetics. Advances in technology especially in nucleic acid sequencing and cultured based microbiology has helped the scientific community to better examine the new roles of microbes in both health and diseases. In summary, advances in microbial phenol-typing and metabolic profiling provide a new insight for developing novel therapies for chronic disease conditions. Application of the plantation of microbiome communities may also help to prevent a range of chronic disorders.

Reza.Nassiri@hc.msu.edu

2nd International Conference on

CHRONIC DISEASES

July 16-17, 2018 Berlin, Germany

Direct evidence of viral infection and mitochondrial alterations in the brain of fetuses at high risk for schizophrenia

Segundo Mesa Castillo

Havana Psychiatric Hospital, Cuba

Background: There is increasing evidences that favor the prenatal beginning of schizophrenia. These evidences point toward intra-uterine environmental factors that act specifically during the second pregnancy trimester producing a direct damage of the brain of the fetus. The current available technology does not allow observing what is happening at cellular level since the human brain is not exposed to a direct analysis in that stage of the life in subjects at high risk of developing schizophrenia.

Methods: In 1977 we began a direct electron microscopic research of the brain of fetuses at high risk from schizophrenic mothers in order to finding differences at cellular level in relation to controls.

Results: In these studies we have observed within the nuclei of neurons the presence of complete and incomplete viral particles that reacted in positive form with antibodies to herpes simplex hominis type I [HSV1] virus and mitochondria alterations.

Conclusion: The importance of these findings can have practical applications in the prevention of the illness keeping in mind its direct relation to the etiology and physiopathology of schizophrenia. A study of amniotic fluid cells in women at risk of having a schizophrenic offspring is considered. Of being observed the same alterations that those observed previously in the cells of the brain of the studied fetuses, it would intend to these women in risk of having a schizophrenia descendant, previous information of the results, the voluntary medical interruption of the pregnancy or an early anti HSV1 viral treatment as preventive measure of the later development of the illness.

segundo@infomed.sld.cu

Notes: