18th - 20th OCTOBER 2018 / BUCHAREST
RAMADA PARC HOTEL, RAMADA PLAZA HOTEL

NEURODIAB
Society for
Diabetic
Neuropathy

6th NATIONAL CONGRESS OF

Diabetic Neuropathy and Diabetic Foot

WITH INTERNATIONAL PARTICIPATION

Event management:

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Coming together is a beginning,
Keeping together is a progress,
Working together is success.
- Henry Ford

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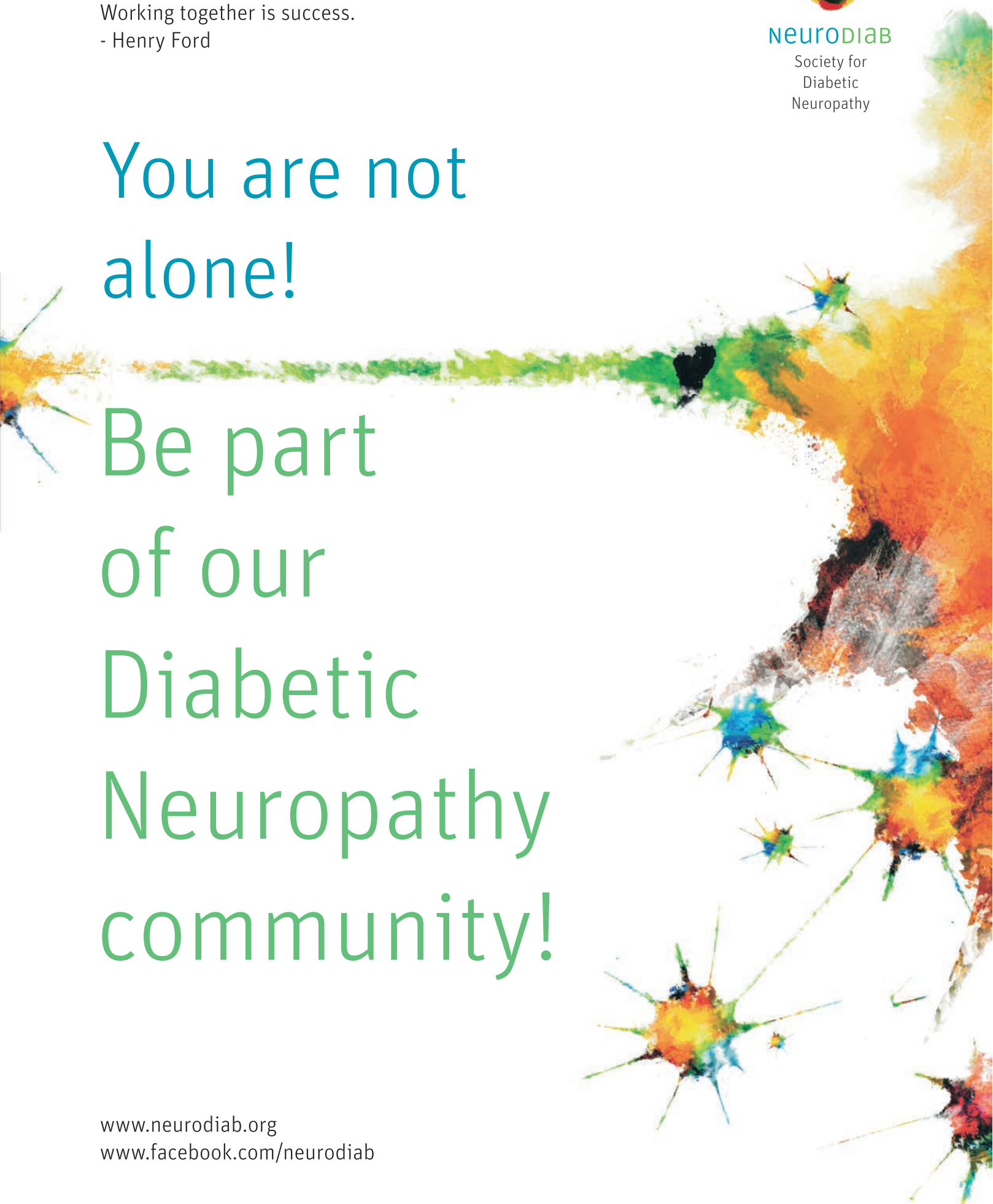

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Messages

Dear colleagues,

Gabriela RADULIAN

M.D., Ph.D.

President of the Society for Diabetic Neuropathy

Vicepresident of the Romanian Federation of Diabetes, Nutrition and Metabolic Diseases

Professor, University of Medicine and Pharmacy “Carol Davila”, Bucharest, Romania

Department Chief
Diabetes II
National Institute of Diabetes, Nutrition and Metabolic Diseases "Prof. Dr. N. C. Paulescu”

Starting from the fact that the diabetic patient with chronic complications needs a holistic approach by overcoming the boundaries between the medical fields from the need to provide an integrated management, here we are at the 6th National Congress of Diabetic Neuropathy and Diabetic Foot with international participation Neurodiab 2018 – a high-level scientific event.

Practice and medical research in the diabetic neuropathy field is continually getting new orientations, that is why on this annual meeting our desire is to achieve a modern diabetic foot management through a multidisciplinary approach.

On behalf of the 6th National Congress of Diabetic Neuropathy and Diabetic Foot Scientific Committee I warmly invite you, as specialists in diabetic neuropathy, to attend this event organized in Bucharest and to achieve together with us an active involvement in monitoring and personalizing the treatment of the diabetic patient with multiple complications in order to increase the quality of his/her life.

Gabriela Radulian
President

General information

MEETING VENUE

Complex Ramada Plaza and
Ramada Parc Hotels, Bucharest
Poligrafiei Street 3-5, District 1,
Bucharest, Romania
www.ramadaplazabucharest.ro

Situated 10 km away from "Henri Coandă" international airport and approximately 20 minutes away from the center of Bucharest.

HOW TO GET TO THE CONGRESS VENUE

REGISTRATION DESK & SECRETARIAT

Desk Opening Hours
Thursday, 18th October, 15 :00 – 19:00
Friday, 19th October, 08:30 – 19:00
Saturday, 20th October, 08:30 – 19:00

Participants' Registration Fee Includes:
- The congress materials and the badge;
- Admission to the scientific program;
- Admission to the industry exhibition;
- Lunch on Friday and Saturday;
- Dinner Thursday through Saturday;
- Coffee breaks on Friday and Saturday.

SPEAKERS CORNER

Is available in the area of registration desk. Ask for assistance.

PRESS REGISTRATION

Press delegates can register at a special press registration desk.

LANGUAGE

The congress language is English. Simultaneous translation is provided.

INTERNET ACCESS

Unrestricted internet access is available throughout the congress venue.

EXHIBITION

Exhibition of pharmaceutical and medical equipment in connection with diabetes, diabetic neuropathy and diabetic foot will be located at the congress venue and opened as follows:
Friday, 19th October, 09:00 – 18:00
Saturday, 20th October, 09:00 – 18:00

CME ACCREDITATION

The Conference is awarded with 12 CME credits by the Romanian College of Physicians. After the event, an online link with a Feedback Form will be sent to all registered participants. The Certificate of Attendance will be emailed to you immediately after you fill in all fields and complete the Feedback Form.
Please sign daily for your presence at the Registration Desk. The Certificate of Attendance is issued only for participants who signed in both days of the Congress!

LUNCH, DINNER AND COFFEE BREAK

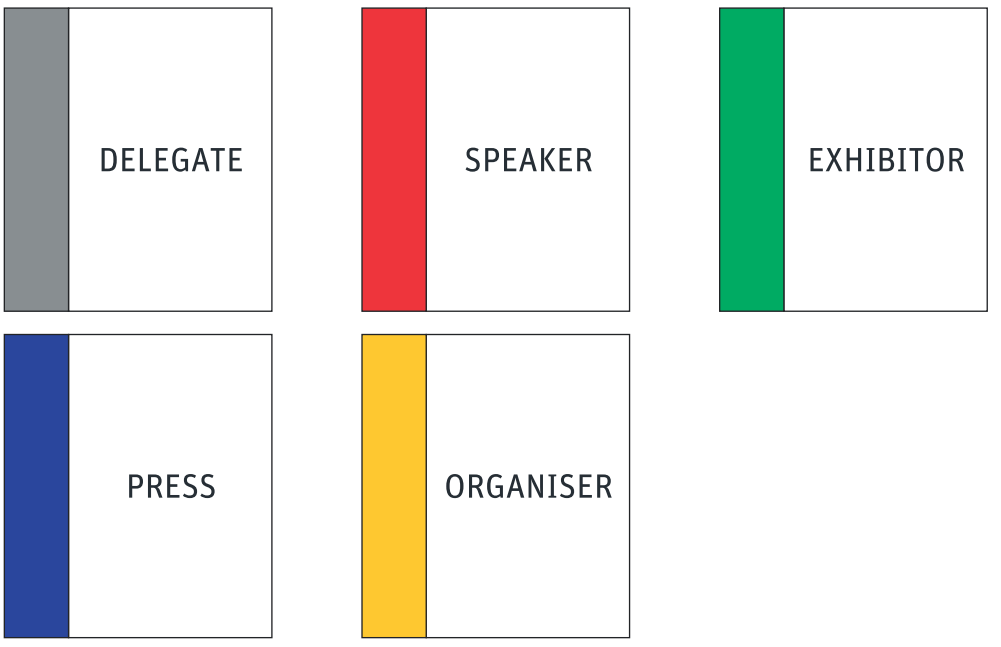
Lunch and Dinner are served in the area of Restaurant La Parc. Please note that the access to lunch and dinner is possible only for registered participants displaying a valid registration badge included in the registration fee that will be provided with the congress materials .

FOOD AND BEVERAGES

Food and beverages are not allowed in the lecture halls. Please note that the access to the coffee breaks, lunches and dinners is possible only with the congress badge. The entire venue is a strictly smoke-free environment.

BADGES

The delegates' name badges serve as an admission pass to all scientific sessions and exhibition. Delegates are asked to keep their name badges displayed at all times during the meeting. Loss of badges can be replaced in special situations and will be charged with 50 Euros.



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All efforts will be made to adhere to the program as printed. However, Neurodiab and its agents reserve the right to alter or cancel, without prior notice, any of the arrangements, timetables, plans or other items relating directly or indirectly to the Meeting, for any case beyond their reasonable control. Neurodiab and the local conference organizer are not liable for any other loss or inconvenience caused as a result of such changes.

Programme

Thursday, the 18th of October 2018

16:00 - 19:00	Înregistrarea participanților / Registration of participants
19:00 - 20:00	Ceremonie de deschidere / Opening ceremony
20:00 - 22:00	Cină / Welcome dinner

Friday, the 19th of October 2018

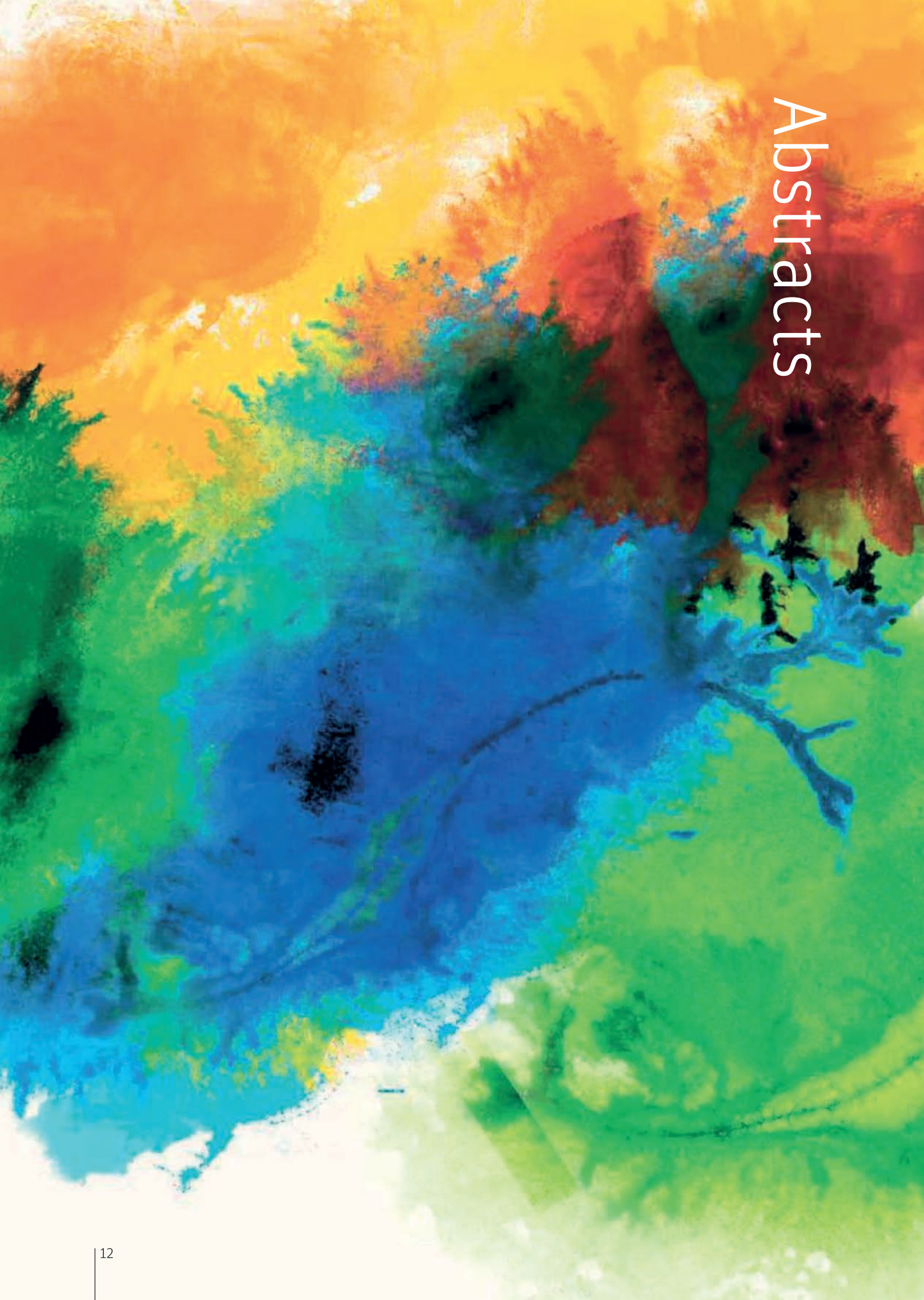
Chairmen: Tamas Varkony, Hungary - Cristian Guja, Romania		
09:00 - 09:30	Deschidere sesiuni științifice Opening of the scientific sessions	Gabriela Radulian, Bogdan Popescu, Romulus Timar, Romania
09:30 - 09:50	Accidentul vascular cerebral și Diabetul Zaharat Stroke and Diabetes Mellitus	Bogdan Popescu, Romania
09:50 - 10:10	Neuropatia autonomă cardiacă la pacientul cu Diabet Zaharat Cardiac autonomic neuropathy in the patient with diabetes mellitus	Gabriela Radulian, Romania
10:10 - 10:30	Neuropatia autonomă la pacientul cu Diabet Zaharat Autonomic neuropathy in the patient with diabetes mellitus	Roxana Darabont, Romania
10:30 - 11:00	Motilitatea gastrointestinală în diabetul zaharat - orice legătură între simptome și semne? Gastrointestinal motility in diabetes – any connection between symptoms and findings?	Tamas Varkony, Hungary
11:00 - 11:20	Consecințele neurologice ale hipoglicemiilor Neurological consequences of hypoglycemia	Cristian Guja, Romania
11:20 - 11:30	Discuții / Panel discussion	
11:30 - 12:00	Pauză de cafea / Coffee break	
Chairmen: Dan Ziegler, Germany - Rodica Pop-Bușui, USA		
12:00 - 12:30	Subdiagnosticarea și subtratarea polineuropatiei: Lecții din studiile PROTECT și KORA Underdiagnosis and Undertreatment of Polyneuropathy: Lessons from the PROTECT and KORA Studies	Dan Ziegler, Germany
12:30 - 13:00	Tendințe curente în Neuropatia Diabetică și legăturile cu sănătatea cavității bucale Current Trends in Diabetic Neuropathy and links with oral health	Rodica Pop-Bușui, USA
13:00 - 13:20	Status electrofiziologic la pacienții cu Neuropatie Diabetică Electrophysiological status in patients with Diabetic Neuropathy	Tudor Lupescu, Romania
13:20 - 13:30	Discuții / Panel discussion	
13:30 - 14:30	Prânz / Lunch	
Chairmen: Mirela Manea, Romania - Doina Catrinoiu, Romania		
14:30 - 14:50	Afectarea nervului optic la pacienții cu Diabet Zaharat Affecting the optic nerve in patients with Diabetes Mellitus	Liliana Voinea, Romania
14:50 - 15:10	Depresia și Diabetul Depression and Diabetes	Mirela Manea, Romania
15:10 - 15:30	Boala Alzheimer și Neuropatia Diabetică Alzheimer's Disease and Diabetic Neuropathy	Raluca Popescu, Romania
15:30 - 15:50	Diabetul Zaharat - factor de risc în demență Diabetes - Risk Factor in Dementia	Georgeta Inceu, Romania
15:50 - 16:10	Tratamentul neuropatiei diabetice The treatment of diabetic neuropathy	Bogdan Florea, Romania

16:10 - 16:20	Discuții / Panel discussion	
16:20 - 16:50	Pauză de cafea / Coffee break	
Chairmen: Raluca Popescu, Romania - Tudor Lupescu, Romania		
16:50 - 17:10	Evaluarea și reabilitarea gleznei și piciorului Assessment and rehabilitation of the ankle and foot	Mihai Berteanu, Romania
17:10 - 17:30	Disfuncția sexuală masculină - De ce, când, cine? Male sexual dysfunction - Why, when, who?	Nicolae Calomfirescu, Cătălin Belinski, Romania
17:30 - 17:50	Microscopia confocală de reflectanță in vivo - o metodă neconvențională de investigare a Neuropatiei Diabetice Confocal microscopy of reflection in vivo - an unconventional method of investigating Diabetic Neuropathy	Daniel Boda, Mihaela Ilie, Constantin Căruntu, Romania
17:50 - 18:05	Asocierea dintre scorul Toronto și valorile SUDOSCAN la pacienții cu DZ tip 2 Association of Tororno clinical Neuropathy Score with SUDOSCAN values in patients with type 2 DM	Diana Sima, Romania
18:05 - 18:20	Valoarea predictivă a scorului de mortalitate la pacienții cu Neuropatie Diabetică. Un indice derivat din chestionarul Norfolk de calitate a vieții. Predictive value of mortality risk score in patients with Diabetic Neuropathy. A composite of items derived from Norfolk QoL – ND questionnaire.	Cosmina Bondor, Camelia Vonica Romania
18:20 - 18:30	Discuții / Panel discussion	
19:00 - 22:00	Cină / Dinner	

Saturday, the 20th of October 2018

Chairmen: Frank Bowling, UK - Ioan Vereșiu, Romania		
09:00 - 09:30	Istoria piciorului diabetic și examinarea The diabetic foot history and examination	Frank Bowling, UK
09:30 - 10:00	Lecții învățate după două decenii de management al piciorului diabetic: perspectiva experienței spaniole Learned lessons after two decades managing diabetic foot: The perspective of Spanish experience	Jose Louis Lazaro Martinez, Spain
10:00 - 10:30	Abordarea echipei italiene în îngrijirea piciorului diabetic Italian Team approach in diabetic foot care	Roberto Anichini, Italy
10:30 - 11:00	Este utilă analiza presiunii asupra piciorului plantar pentru pacientul cu diabet zaharat? Is plantar pressure analysis useful for diabetic patients?	Carlos Salas Verges, Spain
11:00 - 11:20	Piciorul diabetic epidemiologic în România The diabetic foot epidemiology in Romania	Ioan Vereșiu, Romania
11:20 - 11:30	Discuții / Panel discussion	
11:30 - 12:00	Pauză de cafea / Coffee break	

Chairmen: Ariel Odriozola, Spain - Eduard Catrina, România		
12:00 - 12:30	Neuropatia diabetică sensibilă și acuratețea diagnosticului clinic precoce au fost corelate cu o detectare cantitativă pentru unele subtipuri de fibrelor nervoase cu disfuncție la pacienții cu diabet zaharat: evaluarea unui nou dispozitiv față de instrumentele clinice standardizate. The sensitive diabetic neuropathy and an early clinical diagnostic accuracy were related with a quantitative detection for some subtypes of nerves fibers with dysfunction in diabetics patients:the assessment of a new device vs standardized clinical tools.	Odriozola Ariel, Spain
12:30 - 13:00	Ce știm și ce nu știm în managementul piciorului diabetic ischemic What we know and what we do not know in the management of neuroischemic diabetic foot	Kyriaki Kalligianni, Greece
13:00 - 13:20	Piciorul Charcot în practica clinică The Charcot foot in clinical practice	Eduard Catrina, România
13:20 - 13:30	Discuții / Panel discussion	
13:30 - 14:30	Prânz / Lunch	
Chairmen: Gabriela Crețeanu, România - Cornelia Bala, România		
14:30 - 14:50	Piciorul Diabetic în ambulator Diabetic foot in ambulatory	Paula Pavel, România
14:50 - 15:10	De ce avem nevoie de radiolog? Why do we need a radiologist?	Adrian Pavel, România
15:10 - 15:30	Rolul echipei multidisciplinare în prevenirea amputațiilor la pacientul cu Diabet Zaharat. Experința Centrului de Diabet Suceava The role of the multidisciplinary team in the prevention of amputations in the patient with Diabetes. Experience of the Suceava Diabetes Center	Gabriela Crețeanu, România
15:30 - 15:50	Educația terapeutică în depistarea precoce a Neuropatiei Diabetice: cine, când, cum? Therapeutic education in early detection of Diabetic Neuropathy: who, when, how?	Cornelia Bala, România
15:50 - 16:10	Rolul medicului de familie în îngrijirea Neuropatiei Diabetice și a Piciorului Diabetic. UNITED - Programul Național de Educație a MF 2018 - 2020 The role of family physician in the care of Diabetic Neuropathy and Diabetic Foot. UNITED - National Education Program of GP 2018 - 2020	Anca Bălan, România
16:10 - 16:20	Discuții / Panel discussion	
16:20 - 16:50	Pauză de cafea / Coffee break	
Chairmen: Gabriela Radulian, România - Roberto Anichini, Italy		
16:50 - 17:20	Rolul podiatrului în sistemul de sănătate al piciorului diabetic The role of the podiatrist in the diabetic foot health care system	Ilaria Teobaldi, Italy
17:20 - 17:35	Riscul de amputații în cazul terapiei cu inhibitori de SGLT2 The risk of amputations with SGLT2 inhibitors therapy	Daniel Cosma, România
17:35 - 17:50	Factori de risc în Neuropatia Diabetică periferică Risk Factors in Peripheral Diabetic Neuropathy	Andra Nica, România
17:50 - 18:00	Discuții / Panel discussion	
18:00 - 19:00	Ceremonia de închidere Closing ceremony	Gabriela Radulian, România
19:00 - 22:00	Cină / Dinner	



Abstracts

Accidentul vascular cerebral și Diabetul Zaharat
Stroke and Diabetes Mellitus

Bogdan Ovidiu
POPESCU

M.D., Ph.D.,

Professor and Head of the Neurology Clinic at Colentina Clinical Hospital, Bucharest, Romania

President of the Romanian Society of Neurology

Neuropatia Diabetică și controlul metabolic
Diabetic neuropathy and metabolic control

Gabriela RADULIAN

M.D., Ph.D.

President of the Society for Diabetic Neuropathy

Vicepresident of the Romanian Federation of Diabetes, Nutrition and Metabolic Diseases

Professor, University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania

Department Chief
Diabetes II
National Institute of Diabetes, Nutrition and Metabolic Diseases "Prof. Dr. N. C. Paulescu"

Diabetic neuropathy consists of a heterogeneous group of clinical syndromes with different anatomic distributions and a complex pathology, occurring both in confirmed diabetic and pre-diabetic patients.

The available literature shows that the percentage of both T1D and T2D patients, with neurological complaints, varies between 30 and 50%, whereas clinical neuropathy signs are present in 10% of the patients as early as the time of the diagnosis, and in more than 50% of the patients with a disease history of more than 25 years. Chronic hyperglycemia is the main risk factor in the occurrence and progression of diabetic neuropathy. The duration and severity of chronic hyperglycemia are correlated with the severity of neuropathy. Other risk factors include: the level of serum lipids, age, lifestyle (smoking, alcohol intake, nutritional status), the duration and type of diabetes, depression and anxiety, as well as genetics.

The etiopathogenesis of diabetic neuropathy combines multiple mechanisms - the chronic hyperglycemia determines an intracellular excess of glucose which is metabolized via several pathways, causing cellular damage due to: overloading of the electron transport chain from the mitochondria along with the generation of reactive oxygen species, the flow increase in the polyol pathway determines the increase in cellular osmolarity with the decrease in NADPH and the occurrence of oxidative stress; the flow increase in the hexosamine pathway with inflammatory lesions; likewise, the generation of advanced glycation end products (AGE) occurring due to carbohydrates binding to proteins, lipids and nucleic acids eventually affects the cellular function, as well.

Diabetic neuropathy is the most common form of neuropathy in developed countries and accounts for 50-70% of all the non-traumatic amputations, drastically decreasing the quality of the diabetic patient's life. Consequently, establishing multidisciplinary teams of diabetologists, podiatrists, dietitians, neurologists, cardiologists and psychotherapists to assume the care for the patient from the very onset of this complication is extremely important, in order to reduce amputation and mortality rates.

Bibliography:
1. Singh R et al. Diabetic peripheral neuropathy, current perspective and future directions. Pharmacol Res.2014 Feb;80:21-35
2. Said G. Diabetic neuropathy. Handle Clin Neurol.2013;115:579-89
3. Deli G et al. Diabetic neuropathies: diagnosis and management. Neuroendocrinology.2013;98 (4): 267-80
4. Callaghan BC et al. Diabetic neuropathy: clinical manifestation and current treatment. Lancet Neurol. 2012 Jun; 11 (6): 521-34

Neuropatia autonomă cardiacă la pacientul cu Diabet Zaharat
Cardiac autonomic neuropathy in the patient with diabetes mellitus

Roxana DARABONT

University of Medicine and Pharmacy "Carol Davila", Internal Medicine and Cardiology Department of University Emergency Hospital, Bucharest, Romania

Based on the Cardiac Autonomic Neuropathy (CAN) Subcommittee of the Toronto Consensus Panel on Diabetic Neuropathy and the American Diabetes Association, CAN is defined as the impairment of cardiovascular autonomic control in patients with diabetes mellitus (DM) following the exclusion of other causes. The risk of developing CAN is determined mostly by the glycemic control and the duration of DM, but it is influenced by systolic blood pressure, metabolic factors, smoking and the presence of other microvascular complications as well.

The most important features of CAN are: heart rate changes – decreased heart rate variability, resting tachycardia, and postural tachycardia, orthostatic hypotension, loss of circadian blood pressure patterns or QT interval prolongation. Some of these effects are inducing a high probability of exercise intolerance or of "silent myocardial ischemia".

In this lecture we will present also the progression of CAN and the ways in which it can be assessed. Tests reflecting parasympathetic function consists in: short-term ECG recordings with a dedicated software based on Fourier transformation of R-R intervals into waves, able to identify the decrease of the high frequency domain; heart rate variability (HRV) evaluation, performed either in the time or in the frequency domains, with the analysis of ECG in conjunction with respiration and beat-to-beat blood pressure recordings considered to be the best approach. For the sympathetic activity the most appropriate test is based on blood pressure response to standing during head-up tilt-table study which is specifically addressed to the diagnostic of orthostatic hypotension and baroreflex sensitivity. Other tests are far less common, like muscle sympathetic nerve activity or heart sympathetic imaging. Ambulatory blood pressure monitoring is used to find the pathologic patterns of circadian variation in blood pressure.

In patients with diabetes mellitus CAN is strongly associated with increased mortality.

Prevention and treatment of CAN is based mainly on tight glycemic control in addition with the correction of risk metabolic factors and antioxidant drugs.

Motilitatea gastrointestinală în diabetul zaharat – orice legătură între simptome și semne?
Gastrointestinal motility in diabetes – any connection between symptoms and findings?

Tamás VÁRKONYI

Associate Professor in the 1st Department of Internal Medicine, University of Szeged, Hungary

The gastrointestinal manifestations of autonomic neuropathy are common and relevant complications of diabetes. There are multiple levels of regulation in the digestive tract: the central, autonomic and enteric nervous systems and the interstitial cells of Cajal. Many parthogenetic factors modify gastrointestinal motility in diabetes, including duration of the disease, hyper- and hypoglycaemia, electrolyte disturbances, malnutrition and medications such as metformin, acarbose and glucagon-like peptide-1 analogues. Data on the prevalence of gastrointestinal symptoms are inconsistent, but the relationship between complaints and altered gastrointestinal motility is relatively weak. Fluctuating glucose levels and poor quality of life are the main consequences of impaired gastrointestinal function. Altered pharmacokinetics of drugs, insufficient absorption of important nutrients, impaired postprandial regulation of blood pressure and higher prevalence of gastrointestinal infections are all detrimental consequences. 50% of diabetic patients have some disorder of oesophagus motility. Reflux is frequently observed as a result of decreased tone of the lower oesophageal sphincter. Slower gastric emptying is present in the majority of diabetic patients with gastrointestinal autonomic neuropathy. The most characteristic symptoms are postprandial fullness, early satiety, nausea and vomiting, bloating and abdominal pain. The presence of diarrhoea and constipation are common findings in patients with diabetic neuropathy as consequences of gut hypo- and hyperfunction are often observed simultaneously. Constipation and paroxysmal nocturnal diarrhoea is also a characteristic finding of enteropathy. Faecal incontinence may occur due to external anal sphincter weakness and anorectal incoordination as consequences of parasympathetic autonomic or central nervous dysfunction. The large, poorly contracting gallbladder with gallstones is a characteristic finding of autonomic involvement.

Consecințele neurologice ale hipoglicemiilor
Neurological consequences of hypoglycemia

Cristian GUJA

M. D., Ph.D.,

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Head of department, National Institute of Diabetes, Nutrition and Metabolic Diseases "Prof. N. C. Paulescu", Bucharest, Romania

Hypoglycemia is one of the most frequent complications of treatment, both in type 1 and type 2 diabetes patients. Especially treatment with rapid acting insulin and sulphonylureas is associated with increased risk of hypoglycemia. Acute severe hypoglycemia has important neurologic consequences including mood change, blurred vision, impaired cognition and speech and ataxia. This can progress to transient focal neurologic abnormalities and coma, eventually associated with convulsions (generalized or focal). If prolonged, hypoglycemic coma can progress to decortication and decerebration.

In addition to the acute effects, there are important long-term consequences of repeated hypoglycemia episodes, especially in elderly type 2 diabetes subjects. These include psychological consequences such as fear, anxiety, behavioral changes and social isolation but also neurological consequences such as decline of cognitive function with increased risk of dementia. In addition, due to cognitive impairment, recognition of hypoglycemic episodes is very difficult in elderly patients. Thus, symptoms are not specific and can be easily misdiagnosed (stroke, vertigo, visual disturbance) and misinterpreted as dementia-related symptoms. For example, atypical presentation includes episodes of confusion or even delirium. In addition, patients with dementia are unable to communicate their symptoms.

Repeated hypoglycemia may interfere with management of diabetes, inducing a vicious cycle during which neurocognitive dysfunction increases the risk of subsequent hypoglycemia. These induces a vicious cycle between hypoglycemia and cognitive decline. For example, a prospective study including 783 older type 2 diabetes subjects followed-up for 12 years indicated that hypoglycemia doubles the risk of dementia while dementia almost triples the risk of subsequent hypoglycemia. There is debatable if repeated hypoglycemia has similar effects in younger type 1 diabetes subjects. Still, some studies indicate that patients with recurrent severe hypoglycemic episodes have worse cognitive functions than those without a history of severe hypoglycemia.

Another field of great interest is the effect of hypoglycemia, especially repeated moderate/severe episodes, on the generation of the so-called hypoglycemia associated autonomic failure (HAAF) syndrome. This is associated with defective glucose counter-regulation and hypoglycemia unawareness, further increasing the risk of recurrent hypoglycemia. One hypothesis trying to explain the genesis of this syndrome is the brain-metabolism hypothesis. This stipulates that recent hypoglycemia may alter the metabolism of neurons in the central nervous system with decreased glucose sensing of the specific neurons in the hypothalamus, other brain regions and of the peripheral sympathetic nervous system.

Subdiagnosticarea și subtratarea polineuropatiei: Lecții din studiile PROTECT și KORA

Underdiagnosis and Undertreatment of Polyneuropathy: Lessons from the PROTECT and KORA Studies

Dan ZIEGLER

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Professor of Internal Medicine

Institute for Clinical Diabetology, German Diabetes Center, Leibniz Center for Diabetes

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Honorary member of the Society for Diabetic Neuropathy

Member of the Diabetic Neuropathy Study Group - Neurodiab of the European Association for the Study of Diabetes

Painful distal sensory polyneuropathy (DSPN) is associated with considerable morbidity and an increased risk of mortality, but neuropathy screening is underutilized in primary care practice. We conducted a nationwide educational initiative (PROTECT Study) to determine the prevalence and risk factors of diagnosed and previously undiagnosed painful and painless polyneuropathy. Among 1850 participants, 781 had no history of diabetes (ND), 126 had type 1 diabetes (T1D), and 943 had type 2 diabetes (T2D). Painful DSPN was defined as polyneuropathy detected by bedside tests with pain and/or burning in the feet, while painless DSPN was defined as polyneuropathy with paresthesias, numbness, or absence of symptoms. DSPN was detected in 48.2% of ND, 44.3% of T1D, and 55.3% of T2D subjects. DSPN was painful, painless, or atypical in 62.1, 24.8, and 13.1% of the participants. Painful DSPN was more severe than painless DSPN. Painful and painless DSPN were previously undiagnosed in 61.5 and 81.1% of the participants, respectively. In T2D subjects, painful and painless DSPN were associated with a higher and lower BMI, respectively. Among ND participants 39.2% had HbA1c levels indicating prediabetes/diabetes. In conclusion, around half of participants in an educational initiative had DSPN, 62% of whom had the painful entity that correlated with BMI in T2D. Since many cases of neuropathy and diabetes remain undiagnosed, effective strategies to timely detect both conditions should be implemented.

To determine whether painful DSPN is undertreated, we assessed the pharmacological treatment of DSPN in the elderly general population among subjects aged 61-82 years from the KORA F4 survey. DSPN was defined as the presence of bilaterally impaired foot vibration perception and/or bilaterally impaired foot-pressure sensation. Pain intensity was determined by the painDETECT questionnaire. Among 1076 participants studied, 172 (16%) reported pain in the lower extremities, and DSPN was present in 150 (14%) subjects. Forty-eight people with pain in the lower extremities reported DSPN. Only 38% of the subjects with DSPN reporting an average pain level of ≥4 points on the numerical rating scale during the past 4 weeks received pharmacotherapy, predominantly non-steroidal anti-inflammatory drugs (NSAIDs 20%, and opioids 12%). Only 6% of the participants with DSPN received pharmacotherapy for their neuropathy. In conclusion, in the older general population only a small proportion of subjects with painful DSPN receive analgesic pharmacotherapy. Although not recommended by guidelines for the treatment of neuropathic pain, NSAIDs were the most frequently used class of analgesic drugs. Effective measures should be implemented to avoid underuse and misallocation of pharmacotherapy in both patients with neuropathic pain and DSPN.

Tendințe curente în Neuropatia Diabetică și legăturile cu sănătatea cavității bucale
Current Trends in Diabetic Neuropathy and links with oral health

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Diabetic neuropathies (DN) are serious and prevalent chronic complications of diabetes, presenting with diverse clinical manifestations. Distal symmetric polyneuropathy and autonomic neuropathies are the most common forms encountered in practice.

Prevalence rates for DN remain high even in current standard of care, and unfortunately DN has been also identified in patients with pre-diabetes and more recently in youth with type 1 and type 2 diabetes. Current trends and the contemporary prevalence of DN throughout the United States across broad socioeconomic backgrounds and practice settings, reflecting the current standards of care will be discussed as well as evidence re screening,. Screening for symptoms and signs of diabetic neuropathy is critical in clinical practice, as it may detect the earliest stages of neuropathy to enable early interventions. Despite the recent major advances in elucidating the pathogenesis of diabetic neuropathy, there remains a lack of treatment options that effectively target the natural history of diabetic neuropathies or reverse their course once established. Several pathogenetic pharmacotherapies have been investigated, but evidence from randomized clinical trials is very limited. New findings regarding genetic predictors of DPN using an unbiased genome-wide association (GWAS) approach as well as links with oral health and chronic inflammation will be discussed.

Status electrofiziologic la pacienții cu Neuropatie Diabetică
Electrophysiological status in patients with Diabetic Neuropathy

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It is known that the incidence and prevalence of diabetes mellitus is increasing throughout the world, hence the number of patients who develop neuropathy as a complication is also increasing.

Nowadays we are facing a huge number of diabetic patients with neuropathy that need to be evaluated and managed appropriately. So, what is the best way to do this? As neurologists (as in any other specialty), we rely on the history and on a careful clinical examination. Thus, we can get a first impression regarding the clinical picture of the neuropathy, the distribution of the motor and sensory deficits, the disease progression. Accordingly we can complete the evaluation with the neurophysiological examination.

The most frequent form of diabetic neuropathy is the distal symmetric sensory polyneuropathy. Sometimes only the small nerve fibers are affected, and then the electromyography is normal. Involvement of larger sensory fibers, in such length dependent neuropathies, is associated with distal sensory nerve dysfunction, usually seen in the sural nerves.

There are also other forms of neuropathy in diabetic patients that can be identified and functionally evaluated with electromyography:
- Entrapment neuropathies, most frequently the carpal tunnel syndrome and the ulnar neuropathy at the elbow; this is important because such neuropathies can be treated surgically. In such cases we can identify delays in nerve conduction velocities in the entrapment areas and, depending on the duration of the condition, also denervation features in needle – EMG.
- Radiculoplexus neuropathies - with a particular temporal evolution, frequently misidentified, with an intense pain component followed by important muscle atrophies. In such cases, the electromyography can identify the specific distribution of denervation in the involved muscles, which allows the topographical diagnosis.

Such situations can be encountered in patients that already present the typical sensory distal symmetric neuropathy, so it is not uncommon for one patient to have more than one type of neuropathy.

Another important fact is that the high number of patients with “typical” diabetic neuropathy is also exposed to all the other causes of neuropathy as the general population. Electromyographic examinations can identify such situations. An essential issue is that prominent motor changes in a polyneuropathy, in diabetic patients should prompt for searching other causes of neuropathy.

Afectarea nervului optic la pacienții cu Diabet Zaharat
Affecting the optic nerve in patients with Diabetes Mellitus

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Depresia și Diabetul
Depression and Diabetes

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In clinics, regardless of speciality, there are patiens with various conditions. Very rarely, patients suffer form a single affection, most often they accuse multiple symptoms, both somatic and psychic. Somatic disorders, such as Diabetes Mellitus, and psychiatric disorders, such as Depression, evolve concurrently, potentiate one another and often associate with an unfavorable prognosis. The number of symptoms in Diabetes Mellitus is closely related to that of depressive symptoms, but their intensity does not seem to be determined by the severity of the metabolic disorder.

Another characteristic of these diseases is the change of plasmatic level of cortisol. In Depression this is increased and precipitates the occurrence of Diabetes Mellitus, or if it is present, the evolution of somatic disease is unfavorable. (1). The interaction between Diabetes Mellitus and Depression is complex and bidirectional: physical disease may predispose to the development and worsening of the depressive disorder and vice versa. There may be a vicious circle in which physical depreciation causes depression, which in turn can add to the deterioration of the original somatic condition (2).
A number of environmental factors are involved in triggering both diabetes and depression and are likely to be able to explain at least some of the reasons for the association between these two diseases. Examples of such factors include unfavorable lifestyles, such as inactivity, inadequate and unhealthy sleep and diet, psychological and social factors, including early stress, "medical" factors, such as other conditions (eg obesity) and medical treatment (eg corticosteroids). Depression is currently the third most common cause of disability, and in about two years, according to WHO, it will become the second cause (3).

On the other hand, Diabetes Mellitus affects more than 350 million people worldwide and it is predicted that in 2030 it will be the seventh cause of death. According to this information, an increase in the frequency of these affections can be appreciated, but it should also be mentioned that depression is a subdiagnosed psychiatric disorder. Early diagnosis, early initiation of customized medication therapy, dose, duration of treatment, and increased therapeutic adherence may determine the favorable outcome of both conditions.

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Boala Alzheimer și Neuropatia Diabetică
Alzheimer's Disease and Diabetic Neuropathy

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Type 2 Diabetes Mellitus (T2DM) is a disease that currently affects 415 million people worldwide. Furthermore it is expected that there will be more than 640 million patients with T2DM by 2040 as the result of obesity, sedentary lifestyle, ageing and demographic growth.

Epidemiological studies have demonstrated that patients with diabetes mellitus have an increased risk of developing dementia, both as vascular dementia and Alzheimer disease.

Alzheimer disease is the most common cause of dementia and is characterised by a progressive amnestic disorder with the subsequent occurrence of other cognitive, behaviour and neuropsychiatric changes that prevent general social functioning and the performance of the regular activities of daily life. In fact, as compared to subjects without diabetes, patients with T2DM can suffer from several degrees of cognitive impairment from the very early stages of the disease. The relationship between the 2 entities is not very clear yet, but both diseases exhibit similar metabolic abnormalities: abnormal glucose metabolism, abnormal insulin receptor signalling and insulin resistance, oxidative stress, and structural abnormalities in proteins and amyloid deposits.

Different hypotheses have emerged from experimental work in the last two decades. One of the most comprehensive one relates the microvascular damage in diabetic polyneuritis with the central nervous system changes occurring in Alzheimer disease. Another hypothesis considers that cognitive impairment in both diabetes and Alzheimer disease is linked to a state of systemic oxidative stress. Anti-diabetic drugs may have a beneficial effect on glycolysis and its end products, and on other metabolic alterations.
In conclusion, diabetic patients are at increased risk for developing Alzheimer disease, but paradoxically, their biochemical alterations and cognitive impairment are less pronounced than in groups of dementia patients without diabetes. A deeper understanding of interactions between the pathogenic processes of both entities may lead to new therapeutic strategies that would slow the progression of impairment.

Diabetul Zaharat - factor de risc în demență
Diabetes - Risk Factor in Dementia

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Worldwide, we witness to an impressive dynamic of the increase in the prevalence of diabetes, a chronic, progressive disease that requires continued medical care based on multifactorial risk reduction strategies.
At the same time, it was predicted that 34 million people worldwide will have dementia by 2050, and 71% of these people will live in developing countries. Currently, nearly 18 million people have dementia worldwide. Dementia is a clinical syndrome characterized by "a global deterioration of mental functioning in its cognitive, emotional and conative aspects". The concept is comprehensive, including several clinical profiles and causes. The classification of dementia has been a controversial issue since the evolution of modern neuropsychiatry in the late 19th century. Despite the fact that dementia is a clinical concept, most classifications have been based primarily on neuropathological criteria and presumed etiological factors, and less on clinical characteristics.

The most two important types of dementia are dementia of Alzheimer Disease (primary degenerative dementia) and vascular dementia. The disease panorama in vascular dementia has widened from a focus on multi-infarct dementia to include post-stroke dementia, subcortical vascular dementia, as well as mixed dementia (Alzheimer Disease + cerebrovascular diseases). Vascular dementia is a heterogeneous disease group in which the various categories may overlap at times. The dominant view in the literature is that the symptom profile for vascular dementia differs from that of Alzheimer dementia. Vascular dementia is characterized by the following: mental slowness; impaired initiative, planning, and implementation ability (executive function impairment); personality changes; and gait disorders (anterior brain syndrome).

Dementia develops as a result of a complex interplay of clinical and biological factors and is beset by multiple underlying pathological features. The most significant risk factor for both dementia and Alzheimer Disease is old age. Both the incidence and prevalence of disorders leading to dementia increase, almost exponentially, with age.

People with type 2 diabetes represent an important risk group for cognitive impairment and dementia caused by both Alzheimer's disease dementia and vascular brain injury. Type 2 diabetes is a known risk factor for cardiovas cular and cerebrovascular disease and may increase susceptibility to large and small caliber vessel–mediated injury to the brain, including hypox ic events, ischemia, and blood-brain barrier leakage.

Dysfunction of vas cular endothelial cells secondary to insulin resistance and inflammation is a characteristic consequence of type 2 diabetes, and disruption of white matter networks is seen on neuroim aging in patients with type 2 diabetes. Furthermore, white matter dysfunction is associated with poor er cognitive performance in patients with type 2 diabetes. Type 2 diabetes is frequently reported to be more strongly cor related with vascular dementia than with other types, including Alzheimer's disease dementia. More than that, women with diabetes, those with longer duration and ear lier age of onset of type 2 diabetes were more likely to develop vascular dementia.

The strong association between type 2 diabetes and vascular contributions to dementia should be carefully considered when implementing treat ment and prevention measures.

Tratamentul neuropatiei diabetice
The treatment of diabetic neuropathy

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Almost one third of the diabetic persons presents one or another form of diabetic distal symmetric sensorimotor polyneuropathy (DSPN), which represents a major health problem as it may present with excruciating neuropathic pain and is responsible for substantial affected quality of life, morbidity and mortality. Neuropathic pain causes interferences both in daily activities and sleep time. Treatment should be based on four principles:

(1) intensive diabetes therapy and multifactonal risk intervention;
(2) treatment based on pathogenic mechanisms;
(3) symptomatic treatment and (4) avoidance of risk factors and complications.

Management of chronic painful DSPN remains a challenge for the physician and should consider the following practical rules: the appropriate and effective drug has to be identified and administred in each patient by carefully titrating the dosage based on efficacy and side effects; lack of efficacy is considered only after 4 weeks of treatment using the appropriate dosage.

Analgesic combination therapy may be useful, and potential drug interactions have to be considered given the frequent polypharmacy in persons with diabetes.

Evaluarea și reabilitarea gleznei și piciorului
Assessment and rehabilitation of the ankle and foot

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There are various types of Lower leg, Foot, and Ankle injuries/diagnosis including:

- Ankle Sprains
- Plantar Fasciitis
- Achilles Tendonitis
- Tarsal Tunnel Syndrome
- Arthritis
- Fractures
- Stress Fractures
- Bursitis
- Tendonitis
- Neuropathy
- Drop Foot
- Anterior/Posterior Tibialis Tendonitis (shin splints)
- Pre and Post foot and ankle surgery rehabilitation
- Various pain with walking or functional movement

The clinical examination remains the irreplaceable stage in assessing foot and the ankle disorders. It comprises a complete inventory of the patient's complaints and the data obtained from the physical examination. Afterwards, it should concentrate on establishing consistency between symptoms that can be disparate, to link them in a logical pathogenic causal pattern to be used in developing a treatment programme. These correlations are the most often obvious and only require confirmation with standard X-rays. In the absence of consistency, and if a diagnosis is difficult to establish, recourse to more sophisticated investigations, like ultrasound, CT scan, MRI, electromiography becomes worthwhile. To achieve maximum value, the physical examination must be based on prerequisite knowledge of functional anatomy of bone and joint, ligament, muscle, skin and neurovascular components, as all these structures are closely interrelated.

Rehabilitation of ankle injuries include controlling the acute inflammatory process, regaining full ankle range of motion, increasing muscle strength and power, and improving proprioceptive abilities. These goals can be achieved through various modalities (physical agents), flexibility exercises, and progressive strength- and balance-training exercises.

Disfuncția sexuală masculină - De ce, când,cine?
Male sexual dysfunction - Why, when, who?

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Male sexual dysfunction is an ancestral problem, and a medical one for just a few decades.

Once with the development of sexual medicine and with the availability of oral, non-hormonal treatment for Erectile Dysfunction based on Inhibitors of Phosphodiesterase 5 new guidelines were introduced.

A corect diagnostic is based on a bio-psycho-social model approach.

Clinical studies generated by PDE5i enhanced the differences between patients, depending on age, comorbidities, coinciding treatments, social, cultural, educational aspects etc.

Depending on these, therapy differs from case to case and from couple to couple.

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The diabetic patient with a sexual dysfunction is in a class of its own. Unfortunately, for many men with an erectile disorder, represents the moment a diabetes diagnostic is made.

There are frequent situations where a metabolic disorders, associated with a cardiovascular disorder complicates the solution, so long desired, for the sexual dysfunction.

Each patient, especially the diabetic one, represents an entity which requires a personalized approach.

The general issue is: why, when and who help the patient to unloch the problem.

For the diabetic patient, the diabetologist is the first who must tackle the case and then, if the need presents itself call for a multidisciplinary approach.

Microscopia confocală de reflectanță in vivo - o metodă neconvențională de investigare a Neuropatiei Diabetice
Confocal microscopy of reflection in vivo - an unconventional method of investigating Diabetic Neuropathy

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Asocierea dintre scorul Toronto și valorile SUDOSCAN la pacienții cu DZ tip 2
Association of Tororno clinical Neuropathy Score with SUDOSCAN values in patients with type 2 DM

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Background and aims:
There are two types of small nerve fibers, unmyelinated fibers and thinly myelinated fibers. The unmyelinated fibers are also divided in autonomic and sensory fibers. Symptoms of dysfunction depend on which fiber is affected, usually both fibers are affected. Diabetes mellitus (DM) is the most common cause of cardiovascular autonomic neuropathy (CAN). Its prevalence differs between DM types, up to 90% in T1DM and up to 20-73% in T2DM. (1,2)
During physical examination and clinical interview this type of neuropathy can only be suggested. American Autonomic Society endorses 3 types screening tests: quantitative sudomotor axon test, sympathetic skin response and the thermoregulatory sweat test. (3) European Federation of Neurological Societies considers skin biopsy for the quantification of epidermal nerve fiber density the highest accuracy test for small fiber nerve dysfunction. (4) For CAN diagnosis, after running sudomotor testing, cardiovascular testing should include: Valsalva maneuver, tilt-table test with continuous blood pressure measuring, heart rate variability during paced deep breathing.

Among diabetic chronic complications, neuropathy is by far the most common. For diffuse neuropathies, distal symmetric polyneuropathy (DSPN), followed by CAN are the most studied complications. Toronto Clinical Neuropathy Score (TCNS) is generally used for the diagnostic and staging of DSPN. SUDOSCAN is a point-of-care device for screening of sudomotor function and it offers a risk score for CAN by evaluating sweat gland secretory function. Since there are no previous studies focusing on the relationship between TCNS and SUDOSCAN parameters, we aimed to evaluate the relationship between TCNS, sudomotor function and SUDOSCAN-CAN in patients with type 2 diabetes. (6)

Materials and methods: After receiving the Ethic Committee approval, we retrospectively included records of all patients with type 2 diabetes seen in a private practice between 1st January 2017 and 1st of March 2018.

Results: TCNS was associated with all SUDOSCAN conductances scores, and the association remained statistically significant after adjustment for age, gender and BMI.

Conclusion: SUDOSCAN-CAN results were associated with TCNS. Future directions should focus on the cut-off value of TCNS for stratifying risk and screening of CAN.

Valoarea predictivă a scorului de mortalitate la pacienții cu Neuropatie Diabetică. Un indice derivat din chestionarul Norfolk de calitate a vieții.
Predictive value of mortality risk score in patients with Diabetic Neuropathy. A composite of items derived from Norfolk QoL – ND questionnaire.

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Objectives: The objective of this study was to evaluate if linguistically-translated Norfolk Quality of Life for Diabetic Neuropathy questionnaire (QoL-DN) can predict mortality in patients with diabetes mellitus.

Methods: A subset of 2083 patients from the original 21,756 patients with diabetes mellitus was followed for 4 years, patients from 51 Romanian Diabetes Centers included in a 2012 epidemiological study. Patient were divided in two groups: the Cluj group – 481 patients from a single center from Cluj-Napoca and country group – 1602 remained patients from the other centers from the countries. The Cluj group was used to compose the risk mortality questionnaire and the country group was used to confirm the predictive value of it.

Results: High scores for questions (24 to 63) had the power of discrimination between subjects who died and those who survived in Cluj group ($p<0.05$) as did "yes" to the question about ulceration. We therefore propose a Norfolk QOL mortality risk score: the sum of the significant statistically questions (for mortality) in the item Symptoms with response Yes = 1 / No = 0 and the significant statistically questions of the Physical Functioning/Large Fiber, Activities of daily living, Small Fiber, Autonomic items with Likert scale response from 0 = Not at all / 1 = A little / 2 = Somewhat / 3 = Moderately to 4 = Severely and the question on ulceration with (Yes = 1 / No = 0). The mortality risk score ranged from -4 to 72 was significantly greater in those who died compared with survivors (25.84±3.02 vs. 14.99± 0.62, $p<0.001$) in Cluj group. The cut-off for the mortality risk score was obtained using ROC (receiver operating characteristics) as the maximum of the Youden index: 11.5 (Sensitivity=83.9, Specificity=46.7, area under the curve (AUC)=0.699, $p<0.001$).

When comparing deceased and survivors in the country group we found the same results for mortality risk score (26.34±1.06 vs. 15.12± 0.39, OR=1.04, 95%CI 1.03 – 1.06, $p<0.001$). The cut-off 11.5 for the Mortality Risk Score obtained previously was analyzed: Sensitivity was 80.8, 95%CI 74.8-85.9; specificity was 50.9, 95%CI 48.3 – 53.6, $p<0.001$.

Conclusions: We propose here a composite of items derived from the Norfolk QoL-DN questionnaire as a novel "Mortality Risk Score" that can prospectively identify patients with a high mortality risk over a period of 4 years.

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Istoria piciorului diabetic și examinarea
The diabetic foot history and examination

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Most diabetic foot ulcers (DFU) are infected on presentation and a diabetic foot infection (DFI) especially if not managed appropriately can result in tissue loss, amputation or even death. Gram-positive organisms are the commonest pathogens but with wound chronicity gram-negative micro-organisms increase and anaerobes tend to be a feature of neuro-ischaemic ulcers. Although 1 in 3 people carry Staphylococcus aureus, only 2% of people carry the Methicillin-resistant version known as MRSA. MRSA prevalence increased from the 1960s to a peak in the 2000s where it sometimes caused 30% of DFIs – linked to greater antibiotic use and interaction with healthcare facilities. Some reports show MRSA DFIs were more serious, requiring more surgical interventions and longer ulcer-healing times.

Treatment approaches include topical, systemic and surgical. Topical therapy focussed on application of silver dressings and larvae which had promising in vitro data but lacked clinical trial evidence to support their use. Systemic antimicrobial therapy represents the mainstay of treatment with established guidelines for choosing antibiotics – vancomycin and teicoplanin for MRSA though several newer antibiotics exist to overcome side-effect and delivery issues. Of interest is the emerging evidence for local antibiotic delivery through dissolvable beads placed into DFUs or application of a novel antimicrobial cream called Pexiganan.

The effective management of diabetic foot complications relies on achieving stability across multiple aspects of diabetes mellitus care. Glycaemic control, kidney function, visual system, blood pressure and intact cognition are aspects of the disease that considerably influence prognosis. Comprehensive and effective management can only be achieved through multidisciplinary care, across many different care providers.

Patients who require a treatment from a specialist diabetes foot care team need a structured management plan to contend with the multiple comorbidities and complications associated with diabetes mellitus. A specialist foot care team for patients with diabetes mellitus should include a diabetologist, podiatrist, specialist nurse and a surgeon with a thorough understanding of foot function (who can be a podiatric, orthopaedic, vascular or general surgeon).

When multidisciplinary care is delivered, improved outcomes including reduced incidence of minor and major amputations have been demonstrated. One recent study directly compared outcomes associated with care delivered by an established multidisciplinary diabetes mellitus team with care delivered in a hospital that lacked a designated diabetes mellitus team. In this study a substantial reduction in major amputations performed on patients treated by the diabetes mellitus multidisciplinary team (4.7%) compared with those treated without multidisciplinary team input (21.7%) Mortality during hospitalization was also considerably reduced, with a mortality rate of 2.5% being associated with care from multidisciplinary team compared with 9.4% for patients not treated by a multidisciplinary team.

Lecţii învăţate după două decenii de management al piciorului diabetic: perspectiva experienţei spaniole
Learned lessons after two decades managing diabetic foot: The perspective of Spanish experience

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Diabetic foot ulcers are a frequent complication of Diabetes and can lead patients to lower limb loss and death. Managing of metabolic disorders and comorbidities, assuring good vascular supply, discarding infection, off-loading and local wound care constitute the standard of care on the management of diabetic foot. Covering all these concerns is not able by a single specialty and multidisciplinary team (MDT) has demonstrated as the best strategy for reducing amputations rate, shortening healing time, preventing recurrence and increasing expectancy of life. Podiatrist play a big role inside MDT and some international consensus have declared that their inclusion as a member of MDT reduces cost and prevent complication. From the last 20 years podiatry has grown up in Spain in different fields: academic, professional, skills and research. It is showing on this presentation the development of podiatrist's role on the MDT and his responsibilities among prevention, management and research.

Abordarea echipei italiene în îngrijirea piciorului diabetic
Italian Team approach in diabetic foot care

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The concect of multidisciplinary and multiprofessional approach is a mile stone in diabetic foot care.

The team becomes the natural consequence of this concect, where doctors (of different specializations), nurses, podologist, educators put together their expertises to take care a patient with Diabetic Foot.
In Italy in the last 30 years we tried to improve a common pathway to diabetic foot care.

Our experience has born at last 20 years of 20 th century with organization of real foot care unit in many hospitals, were different Specialist (diabetologist; orthopedics, vascular surgery and nurses ecc) took care patients referred by Health care district (GPs). The model chosen was diabetologist-directed and around them with specific local diagnostic therapeutic and welfare pathway we have been established hospital equipes (nurses, podologist, different medical and surgical specialist) and the relationships with the health care system (Gps, nurses, podologist) for prevention, education and for early diagnosis, and continuity of care in patients discarged from the hospital. Our Idea of Diabetic Foot approches could be summarized in:

- Longstanding Education and Prevention from every component of team
- Early diagnosis of Foot Lesion from Gps.
- Early contact with the diabetologist from Health care district
- Early treatment by diabetic foot care team (multiprofessional and multidisciplinary approach).
- Continuity of Health Care assistance.

Este utilă analiza presiunii asupra piciorului plantar pentru pacientul cu diabet zaharat?
Is plantar pressure analysis useful for diabetic patients?

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The systems of analysis of plantar pressure with sensor insoles are tools that allow us to quantify kinetic parameters that are not visible to the naked eye. The evaluations of how the foot behaves in front of pathologies such as diabetes, also the conditions as it does, are essential for the prevention of lesions as well as for the treatment strategies and their follow-up. Plantar ulcers are a central issue that, for a long time, has been thought to be only related to pressure, but other types of forces, such as shearing, should be included in this test. To understand what happens when the foot is walking we have to have a clear view of the physiology of the foot and the conditions in which it works. The purpose of this presentation is to show clearly, with examples, how footwear and materials can be influenced by the foot function, using specific kinetic parameters and its meaning.

Piciorul diabetic epidemiologic în România
The diabetic foot epidemiology in Romania

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Epidemiological studies are a pre-requisite for any strategies focusing on improving quality of care for patients with diabetes mellitus (DM) and not only for them. Having solid data on the magnitude of the problems and comparing them with other sources is the right way for finding and/or improving the optimal medical practice.

Until recently the data on diabetic foot (DF) impact in Romania were relatively scarce, originating only from local, hospital-based studies. In 2015 were published the results of the first nationwide, multiannual study on the frequency of the lower-limb amputations in patients with diabetes (Diabetes Research and Clinical Practice, 2015). The incidence of these procedures in the at-risk population (597.2 %000) was consistently higher than in other European countries. We observed also a decreasing tendency of the amputations number in patients with type 1 (DM) in contrast with higher figures for those with type 2 DM. In the same year we had also the results of a survey in more than 20.000 patients with DM (Journal of Diabetes and Its Complications. doi:10.1016/j.jdiacomp.2015.04.001), in which we used The Norfolk Quality of Life in Diabetic Neuropathy questionnaire, showing an estimated prevalence of more than 67% for DN, and also a prevalence of previous/actual foot ulceration varying between 10.0% and 22.3% in the different regions of our country. Reevaluating a cohort from the 2012 QoL-DN study after four years, using well accepted diagnostic tools, as Toronto Clinical Neuropathy Scoring System) we have observed a prevalence of 49% for DN.

It is worrying that the results of a recent online survey for family physicians, generated by our Association, had revealed that a small proportion of them are using in their daily practice the accessible tools as the monofilaments and tuning forks for screening for diabetic foot problems.

Neuropatia diabetică sensibilă și acuratețea diagnosticului clinic precoce au fost corelate cu o detectare cantitativă pentru unele subtipuri de fibrelor nervoase cu disfuncție la pacienții cu diabet zaharat: evaluarea unui nou dispozitiv față de instrumentele clinice standardizate.

The sensitive diabetic neuropathy and an early clinical diagnostic accuracy were related with a quantitative detection for some subtypes of nerves fibers with dysfunction in diabetics patients: the assessment of a new device vs standardized clinical tools.

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Objective: Peripheral neuropathy (PN) is associated with increased rate of morbidity and mortality. Due to these reasons, it is important to detect PN as early as possible. Nerve dysfunction (NS) includes, vibration, thermal, and pain thresholds in diabetic patients. Our objective was to demostrate the ability of a new inexpensive and handled Quantitative Sensory Testing device (QST) NerveCheck, to detect clinical and subclinical neuropathic dysfunctions in type 1 and type 2 diabetic patients (DM 1-2,) in a latin-european population. We compare NerveCheck vs standarized clinical tools.

Method: 198 DM 1-2; underwent NerveCheck, vibration perception threshold (VPT), cold (CPT), warm (WPT) Heat pain test (HPT) in comparison with clinical tools : McGill Questionaire (PQ), the Total symptom score (TSS) Neuropatic disability score(NDS). Neuropathy diagnostic (Neurodiab consensus) Statisctical Methods: Pearson chi² (chi²); Kappa concordance agreement (KCA).

Results: NerveCheck complet Test (NCK.CT) vs. global clinical tools=TTS+PQ+NDS (GCT), Pchi²= 26.1054, Pr=0.0001, KC A=64,25%, Prob>Z=0.0001. GCT detected PN 65.05% of 100% NCK.CT. and 35.7% (+) TSS of 100% detected PN by NerveCheck, Pchi²=5.2578, Pr=0.022, KCA 60.31%, Prob>Z=0.001. VPT NS in 64% of 100% NCK.CT, Pchi²=17.1333, Pr=0.0001, KCA=64.82%, Prob>Z=0.00001. CPT 30.68% NS in 100% of abnormal NDS, Pchi²=208476, Pr=0.00001. HPT 43.75% NS in 100% of nomal NDS subjets, Pchi²=13.7586, Pr=0.00001, KCA=63.82, Prob>Z=0.00001. There was a significantly greater NS detected in subjects with NCK.CT compared GCT.

Conclusion: NerveCheck is a new inexpensive QST device, that allows an accuracy diagnostic ability to detects nerves fibers subtype damage in patients with clinical or subclinical PN stages.

Ce știm și ce nu știm în managementul piciorului diabetic ischemic
What we know and what we do not know in the management of neuroischemic diabetic foot

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Private Practice of Vascular Surgery, Athens, Greece

The anatomic common denominator that unites diabetic patients with severe limb ischemia is the presence of significant multilevel arterial disease, very often associated with neuropathy and compromised outflow in pedal arteries, which remains a major surgical challenge in our era.

Our purpose is to point out some critical sides in decision making for managing diabetic patients with devastating foot neuro-vascular complications which have long been underestimated. Crucial factors which can hamper any ulcer healing are out of severe neuropathy and a consequent infection, an impaired collateral arterial network and a microvascular disfunction associated with an abnormal lipid environment, despite current therapies.

Early and aggressive revascularization to address multilevel arterial disease (BTK and BTA) in the presence of foot wounds located in different angiosomes and fed by different arteries (dorsal and plantar circulation) can be the key to achieving our goal.

Timing and any selected surgical or endovascular interventions should always be considered to offer maximal improvement to diabetic ulcer healing and to prevent amputation.

Piciorul Charcot în practica clinică
The Charcot foot in clinical practice

Eduard CATRINA

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Member of the Directory Council of Society for Diabetic Neuropathy

Charcot neuropathic osteoartropathy, also known as neuro-osteoartropathy or more simple as Charcot foot, is a serious and potentially limb-threatening lower-extremity complication of different causes of peripheral neuropathy. This progressing condition is considered an inflammatory syndrome, affecting the bones and the joints of the foot and the ankle and is characterised by different patterns and degrees of bone fractures, subluxation, dislocation, in most of the cases leading to debilitating deformities. Described for the first time in 19th century as a complication of leprosy or tertiary syphilis, nowadays this condition has close relations with diabetes mellitus and diabetic neuropathy.

Charcot neuro-osteoarthropathy usually occurs in diabetic patients during their sixth and seventh decade, and almost 80% of this population have had diabetes for over 10 years. Bilateral involvements has been reported to occur in 5.9% to 39.3% of the cases. It seems that all the patients have to have severe neuropathy and renal failure favors the course of pathology.

Even today the pathology is not very simple to diagnose and to treat. A red, hot swollen foot, sometimes bilateral, is rarely diagnosed as Charcot foot rather than cellulitis, phlegmon or metatarsal fracture. The more so as the pathology require a trauma or surgical interventions to set off.

When is recognised in early stages, allows to get good results only by conservative management, minimising potential deformities. Thus septic complications and surgery can be avoided.

Traditionally, the management of the Charcot neuroarthropathy has been non surgical. The purpose is to obtain, after the active phase is gone, an stabilised, non-deformed foot and most of all, wearable with a proper shoe. The conservative management consist of long-term immobilisation in total contact cast (TCC) or, more modern, in pneumatic walking braces (Air-cast), for more than 14 -18 weeks. In some cases the immobilisation were necessary for up to a year. Other treatment methods and drugs are debatable.
However, surgical treatment is imposed many times by structural deformities and osteoarticular modifications as well as the septic complications that could be limb-threatening or even life-threatening. In these circumstances surgery become the main therapeutical sequence in order to save the limb and sometimes the patient's life.

Piciorul Diabetic în ambulator
Diabetic foot in ambulatory

Paula PAVEL

Dr. med., senior surgeon in Diabetes Clinic, County Emergency Hospital, Cluj Napoca, Romania

Founder member of Society for Diabetic Neuropathy

People with diabetes develop foot ulcers because of neuropathy (sensory, motor, and autonomic deficits), ischaemia, or both. The initiating injury may be from acute mechanical or thermal trauma or from repetitively or continuously applied mechanical stress.

Wounds of the foot are the most common reason for hospitalization in patients with diabetes. It is estimated that 15% to 20% of patients with diabetes will develop an ulcer on their foot at some point and, for many of these cases, the most appropriate treatment results in some form of surgery.

Foot infections are common in the diabetic patient. Early recognition, proper assessment and prompt intervention are vital. A combination of surgery and antibiotics is mandatory in virtually all foot infections. The aim of surgery is first, to control the infection, and second, to attempt to salvage the leg. The eventual goal is always to preserve a functional limb. Foot deformities resulting from surgery may cause reulceration and a high morbidity. The surgical treatment of the infection largely consists of draining of pus and removal of all necrotic and infected tissue. Frequently, revascularization of the foot is needed to save the limb. That is why there must be a close cooperation with the vascular surgical service. The surgeon must have a thorough knowledge of foot anatomy and must be familiar with the defects in wound healing that are caused by diabetes. The outcome of surgery mainly depends on the skill, care and experience of the surgeon. The best results are achieved within a multidisciplinary setting.

My presentation will cover clinical cases ambulatory treated in the Diabetic Foot Cabinet, Department of Diabetes, Nutrition and Metabolic Diseases, Emergency County Hospital Cluj-Napoca.

De ce avem nevoie de radiolog?
Why do we need a radiologist?

Adrian PAVEL

M.D.,

Radiologist at Emergency Clinical Hospital, Cluj-Napoca, Romania

Diagnosis and treatment of foot disease in patients with diabetes is a common clinical-radiologic challenge. The radiologist plays a significant role in the management of this pathology having both diagnostic and treatment availability. It is essential for any radiologist in this field to be fully clinically dedicated, to obtain and maintain personal expertise and to be part of a multidisciplinary team. Also is very important for the radiologist, from the team perspective, to have access to all patient data available in order to maximize any radiographic and imaging techniques needed.

From the diagnostic point of view the greatest challenge is to recognize osteomyelitis and neuroarthropathy in the early stages when plain radiographs do not depict any initial signs of osseous fragmentation or dislocation and further, in more advanced stages, to differentiate between them. Plain radiographs, computed tomography and magnetic resonance imaging have their own unique clinical indications and the recent technical advances in imaging allow discrimination between both entities. Also the following techniques are used in diagnostics of lower limb vascular involvement: Doppler flow imaging, conventional and subtraction arteriography, angio-CT and angio-MR. Ultrasonographic methods are valuable, noninvasive tools that may be used multiple times to assess the stage of the disease and patient's qualification for treatment, as well as to monitor the results of treatment procedures.

From the treatment point of view interventional radiology provide probably the best revascularization technique in patients with a foot ulcer and peripheral artery disease (PAD).

Rolul echipei multidisciplinare în îngrijirea piciorului la pacientul cu diabet zaharat
The role of the multidisciplinary team in the care of the leg of the person with diabetes mellitus

Gabriela CREȚEANU

M.D.

Diabetes, Nutrition and Metabolic Diseases, "Sf. Ioan cel Nou" Emergency County Hospital, Suceava, Romania

Patience with diabetes mellitus can develop problems of the feet as a result of lesions of nerves and blood vessels. These can easily lead to complications like peripheral arterial disease, polyneuropathy, which lead to amputation of the limbs. We have to keep in mind the four elements that are important, namely **prevention**, diagnosis, care and education, but the necessity of prevention is the priority.

According to statistics, 70% of the total number of lower limb amputations is performed among people with diabetes, worldwide every 20 seconds one foot is amputated due to diabetes, and according to IDF 2013 if DIABETES would be a country, it would be the **4th largest in the world**.

This diagnosis of the **diabetic foot** is a CONCEPT consisting of diabetic neuropathy, diabetic arteriopathy and osteoarthropathic lesions, and for this reason this concept has to be fully dealt with by addressing all of its elements.
The person with diabetes mellitus is special due to the complexity of the disease he suffers from, that is why the multidisciplinary approach of this condition is essential for the therapeutical success. The people in the care-team of the foot of the person with diabetes mellitus has to communicate very good with one another, each and everyone knowing his/her role and degree of involvement, and these communication skills extend to patients who in their turn understand so differently the illness they suffer from.

The multidisciplinary team consists of: a family doctor, a diabetologist, a neurologist, a diabetes educator, a podiatrist, a vascular surgeon, an interventionist radiologist, an orthopaedist, a kinetotherapist, a psychologist and of course let us not forget the most important member of the team towards who we must focus all our attention – THE DIABETES PERSON.

At the ”Sf. Ioan cel Nou” County Emergency Hospital Suceava, the multidisciplinary team works, and since 2012 there is a **Diabetic Foot Medical Office**, equipped with performant equipment and the whole range of non-invasive and invasive investigations. In this respect, endovascular balloon angioplasty treatment and stent mount in the case of a diabetic foot is considered to be a first-time modern treatment that allows treatment in an optimal manner, with rapid recovery and reduced hospitalization, **the clear results of minimally invasive treatment showed a 50% reduction of amputations in the Suceava County Hospital.**

We wish for the person with the diabetic foot to reach the multidisciplinary team and to follow the steps of prevention, diagnosis and treatment and of course to regain the confidence that “the feet are the most important connection of the man with the earth.”

Educația terapeutică în depistarea precoce a Neuropatiei Diabetice: cine, când, cum?
Therapeutic education in early detection of Diabetic Neuropathy: who, when, how?

Cornelia BALA

Lecturer, University of Medicine and Pharmacy, Cluj-Napoca, Romania

Dr. med., Ph.D., senior specialist in Diabetes Clinical Center of Diabetes, Nutrition, Metabolic Diseases, Cluj-Napoca, Romania

President of the Romanian Association for Education in Diabetes

According to a definition from the World Heath Organisation in 1998, therapeutic patient education (TPE) is education managed by health care providers trained in the education of patients, and designed to enable a patient (or a group of patients and families) to manage the treatment of their condition and prevent avoidable complications, while maintaining or improving quality of life. Its principal purpose is to produce a therapeutic effect additional to that of all other interventions (pharmacological, physical therapy, etc.).

Diabetic neuropathy is the most frequent specific complication of diabetes and diabetic foot is associated with high burden and costs as well as high risk of ampulation with decreased quality of life. Their pathogenesis includes hyperglycemia and atherosclerosis but also poor foot care.

Education can be one of the most efficient interventions in the prevention of both diabetic neuropathy and diabetic foot. It requires a structured programme delivered by trained health care providers or other persons involved in TPE. The content of a session on diabetic foot should include topics like alert symptoms of diabetic neuropathy and need to present for diagnosis in a specialized facility (diabetes clinic, neurology clinic, diabetic foot clinic); risk factors for diabetes neuropathy and diabetic foot; available treatments for diabetic foot; need for regular check-up; rules to follow for self-care of foot to prevent ulcerations and amputation.

Newer concept like health literacy and patient activation could and should also be incorporated into TPE for chronic diseases and particularly for diabetic neuropathy. Examples of strategies that can reduce the burden of clinical consultation and increase percentage of patients screened are application of simple screening tests for diabetic neuropathy at home, either by the patient himself or a caregiver- such as neuropad or Ipswich Touch Test.

In a recent review published in the Cochrane Database Systematic Reviews, it was shown that there is insufficient robust evidence that limited patient education alone is effective in achieving clinically relevant reductions in ulcer and amputation incidence but this was due mainly to lack of well-designed and powered clinical studies in this field of interest.

In conclusion, continuous efforts should be done by both clinicians and researchers to practice and demonstrate that TPE is indeed an important non-pharmacological intervention in diabetic neuropathy.

Rolul medicului de familie în îngrijirea Neuropatiei Diabetice și a Piciorului Diabetic. Programul Național de Educație a MF 2018 - 2020

The role of family physician in the care of Diabetic Neuropathy and Diabetic Foot. National Education Program of GP 2018 - 2020

Anca BĂLAN

M. D. , F. M. , Ph. D.,

Trainer of trainers

Head of Associate Works, "Iuliu Haţieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

Diabetes and its complications are rapidly becoming the world's most significant cause of morbidity and mortality. Diabetes eventually affects every part of the body, but it frequently involves the feet first. The key to treating this disease is to get ahead of it and treat it earlier in its progression.

We need to pay far more attention to diabetic neuropathy and diabetic foot. There is a need to prevent or delay the onset of complications, avoiding serious consequences for diabetic patients health and their well-being.

Due to their curricula, this task should be successfully accomplished in family medicine. The main goals for family doctors should be to promote early detection and intervention; provide the criteria for time- adequate referral to a second or third level centers and serve as tool to educate people with diabetes about the importance of prevention in this pathology.

The basic management for diabetes in primary care should be considered on the basis of individualized, personalized and comprehensive treatment targets that include well controlled blood glucose, blood pressure and lipid profile, weight management, smoking cessation, a healthy diet and physical activities such as walking; all these as a consequence of a complete history (available in patient file) and physical examination (including feet). In family medicine this happens al least one or two times a year.

From February 9-10th 2018, 25 family doctors trainers were trained to improve their competences on the management of diabetic neuropathy and diabetic foot. They will educate other family doctors across the country on the prevention, diagnostic and treatment of major complications of diabetes, targeted on diabetic foot.

The educational program has an online component: two electronic courses about diabetic neuropathy and diabetic foot. The courses are hosted by the e-learning platform of National Society of Family Medicine. On June has started the one day hand workshops for family doctors.

The Association of Podiatry in partnership with National Society of Family Medicine intend to train 1000 physicians for practicing simple medical tests for screening of diabetic neuropathy, peripheral arterial disease and for preventing ulcerations in their patients with diabetes. This program is targeted on well being of patients and reducing amputations in Romania.

Rolul podiatrului în sistemul de sănătate al piciorului diabetic
The role of the podiatrist in the diabetic foot health care system

Ilaria TEOBALDI

Podiatrist

Diabetic Foot Clinic, Azienda Ospedaliera Universitaria Integrata di Verona, Italy

Italian Podiatry is still evolving and expanding. In 1996 the Italian Health Care System established the first level degree in Podiatry and before that moment Podiatrist professional learning had been a prerogative of regional school. That is why the first Podiatrists in the diabetic settings in Italy had few qualifications and decision-making autonomy. The University Podiatrists have been regularly employed from 2001 in several settings: diabetic, orthopedic, rheumatologic. The role of Podiatrist in the diabetic setting is heterogeneous and it depends on professional specific training and on the level of the foot clinic: first level (district), second level (diabetic foot ambulatory), third level (regional reference foot clinic). The role of the podiatrist can be organized in three areas: pre-ulcerative, ulcerative, post-ulcerative.

In pre and post ulcerative phases the podiatrist plays an important role in the prevention of ulcers and recurrences and the activities can be summarized in:

- objective examination and global functional assessment
- screening of neuropathy and vasculopathy to assess the ulcerative risk score
- nail and skin care: onychomycosis and onychodystrophies, partial removal of ingrowing toenail, hyperkeratosis, skin maceration or dyshidrosis and fungal infections
- biomechanical assessment
- insoles and shoes assessment
- therapeutic education for patients and care givers

In active ulcerative phase the podiatrist still plays an important role that can be summarized in:

- wound care
- custom-made offloading : total contact cast, localized insoles offloading
- offloading device training to patients and care givers
- foot and leg bandages
- technical support to the team

Another technical skill of the Italian podiatrist is making custom insoles for every kind of pathology such as diabetic patients but it is really rare to find this kind of activity inside a public diabetic foot clinic.
In the last decade Italian podiatry has evolved rapidly creating partnerships with other European universities such as Spain and France and in the intent for the future is to implement the professional autonomy.

Riscul de amputații în cazul terapiei cu inhibitori de SGLT2
The risk of amputations with SGLT2 inhibitors therapy

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Romania Diabetes Futsal Team Physician (DiaRomania)

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Member of the European Association for the Study of Diabetes (EASD)

Member of the Society for Diabetic Neuropathy (NeuRoDiab)

Sodium–glucose linked transporter type 2 (SGLT2) inhibitors are a relatively new class of antidiabetic drugs with positive cardiovascular and kidney outcomes. SGLT2 inhibitors lower the glycemic values by decreasing the renal threshold for glucose, leading to increased urinary glucose excretion and a mild osmotic diuresis that may be associated with a reduction in intravascular volume.

Analysis of data from the CANVAS Program, which comprises 2 large CV outcomes trials of canagliflozin in patients with T2DM and a history or high risk of CV disease, the CANagliflozin cardiovascular Assessment Study (CANVAS) and CANVAS-Renal (CANVAS-R), showed an increased risk of lower extremity amputation, mainly of the toe and middle of the foot. The exact mechanism is not known, but assumptions involving reduced volemia, increased hematocrit and blood viscosity were made, based on previous experience with thiazide diuretics. The current evidence doesn't support an increased risk of amputations in patients treated with dapagliflozin or empagliflozin. Furthermore, real-world studies revealed no evidence of increased risk of amputations for new users of canagliflozin vs. non-SGLT2 inhibitors, but the differences in patients' characteristics or drug exposure duration could explain these results. These divergent signals of harm in the limb coupled with general cardiovascular benefit have raised questions, including whether the observation in CANVAS and CANVAS-R is a result of chance alone.

Other explanation for these contradictory findings is the possibility that in many trials some amputations were not listed among serious adverse events in a large scale trial as the EMPA-REG Outcome. As a matter of fact, some investigators could have registered as a serious adverse event the process eventually leading to amputation (e.g. lower limb ischemia or infection), but not the surgical procedure per se.

The ongoing DECLARE-TIMI 58 trial (>17,000 type 2 diabetic patients with either risk factors for or established cardiovascular disease, with well-characterized PAD group, with prospective ascertainment of amputation events and their etiologies and nested biosample studies) will answer whether SGLT2 inhibition with dapagliflozin increases amputation risk, a finding that would support a class effect or, in case of absence, would suggest an off-target effect particular to canagliflozin. Beyond this observation, it will provide a rich dataset to explore the pathobiology and predictors of limb outcomes in patients with peripheral artery disease and diabetes mellitus. Deciphering predisposing factors and mechanisms of this rare adverse event will be crucial to maximize the benefit of SGLT2 inhibitors in clinical practice.

Factori de risc în Neuropatia Diabetică periferică
Risk Factors in Peripheral Diabetic Neuropathy

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Diabetic peripheral neuropathy (DPN) is the most common complication associated with diabetes. DPN is a common complication of type 1 and type 2 diabetes; up to 26 percent of people with type 2 diabetes have evidence of nerve damage at the time that diabetes is diagnosed.

DPN can present as a loss of sensation, may lead to neuropathic ulcers, and is a leading cause of amputation. Many DPN patients experience pain or discomfort, anxiety, depression, and limitations in activity, and may lose workdays or show decreased productivity as a result.

DPN has a profound effect on patients quality of life in numerous physical and psychosocial areas of their lives.

Major risk factors of PND include diabetes duration, hyperglycemia, and age, followed by prediabetes, hypertension, dyslipidemia, and obesity. There are some additional risk factors like height, vitamin D deficiency, genetic factors, smoking, insulin resistance, hypoinsulinemia. The appearance of polyneuropathy can also be determined by modifying risk factors such as hyperglycemia, hypertension, dyslipidemia, obesity, smoking and vitamin D deficiency.

Tight glucose control targeting near-normal glycemia in patients with type 1 diabetes dramatically reduces the incidence of distal symmetric polyneuropathy and is recommended for distal symmetric polyneuropathy prevention in type 1 diabetes. In patients with type 2 diabetes with more advanced disease and multiple risk factors and comorbidities, intensive glucose control alone is modestly effective in preventing distal symmetric polyneuropathy and patient-centered goals should be targeted. Lifestyle interventions are recommended for distal symmetric polyneuropathy prevention in patients with prediabetes/metabolic syndrome and type 2 diabetes.

In type 1 diabetes, increased low-density lipoprotein cholesterol (LDLc) and triglycerides have been identified as predictors of DPN. In Type 2 diabetes, fibrate and statin use significantly reduced the incidence of DPN over 5 years.
Obviously, knowledge of risk factors for diabetic peripheral neuropathy is clinically useful, because it offers the opportunity for delay and prevention of this complication. Some risk factors are modifiable and should receive the clinician's attention.

Exhibitor profiles

NEURODIAB
Society for Diabetic Neuropathy

Society for Diabetic Neuropathy

The Society for Diabetic Neuropathy (NEURODIAB) was established in August 2012 by a national and international group of clinicians and basic researchers, in order to promote a strong collaboration platform for interdisciplinary medicine and to strengthen the knowledge flow from the academic community towards practitioners.

NEURODIAB is a scientific organization that focuses on basic and clinical research creating a discussion platform to contribute to a better understanding of endogenous basic biological processes and, consequently, to the development of pharmacological and non-pharmacological strategies against the complications of Diabetes Mellitus, especially against diabetic neuropathy and diabetic foot.

In order to provide an accurate framework for the future and to accomplish the goals of our Society, annually, the 3rd week of October is dedicated to diabetic neuropathy, and it is called Diabetic Neuropathy Week. With this opportunity, we organize round tables with general practitioners and patients, which are led by specialists in diabetes, neurology, and also surgeons. In the last days of the 3rd week of October we organize an international conference to open the stage for debates and updated theories in the discussed field. Once every year, in the 3rd week of July, we organize the Summer School for Diabetic Neuropathy and Diabetic Foot. This event is relying on the top opinion leaders and it is dedicated to young doctors who specialize in diabetes, neurology, internal medicine, and orthopedy, being structured as an interactive academic forum for them.

NEURODIAB is also involved in post-graduate educational projects that aim to create bridges between the academic community, researchers, and practitioners.

Young doctors can benefit from scholarships while basic and clinical researchers can benefit from grants. NEURODIAB can also provide other complex communication approaches.

The Society for Diabetic Neuropathy is an association recognized by the Romanian College of Physicians as a provider of continuous medical education.

If you have a question about something you read on this presentation, or you are interested in starting a collaboration, please feel free to contact us by email at secretariat@neurodiab.org

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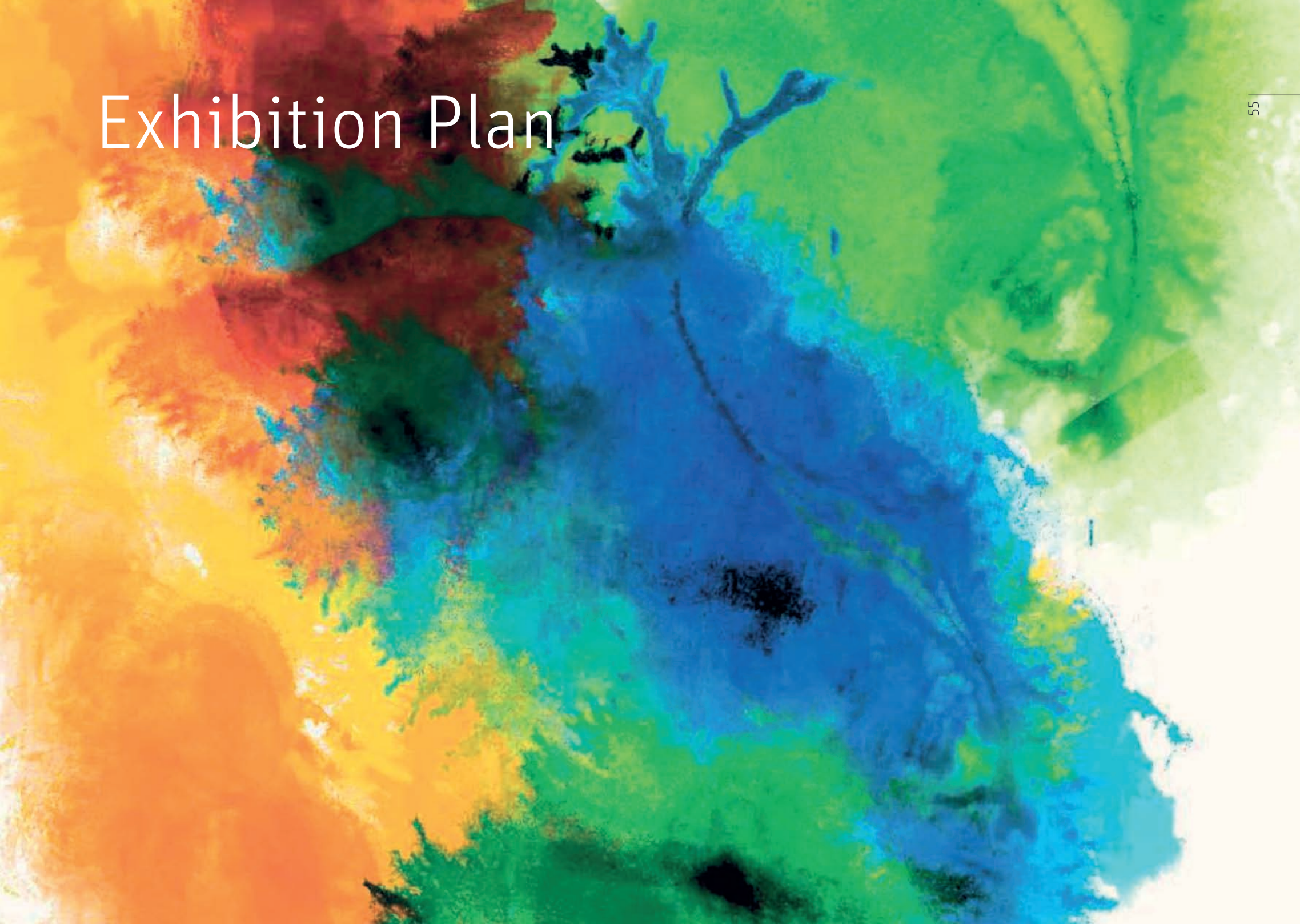

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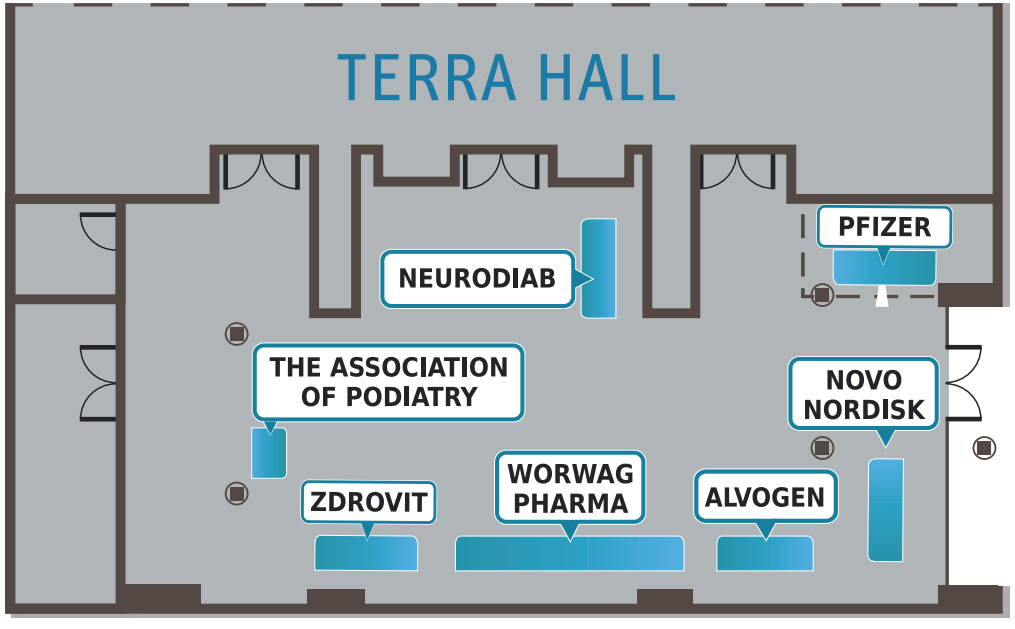

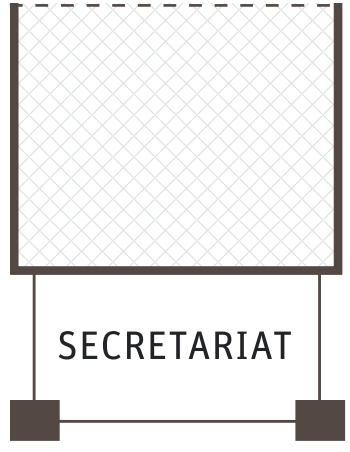

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