

Editorial Article

Polish Lipid Association – A strong response to the problem of lipid disorders in Poland and Central and Eastern Europe

As a group, lipid disorders constitute one of the most important and common risk factors for atherosclerotic disease. According to the *cardiovascular continuum* theory, lipid disorders promote the development of atherosclerosis and its clinical sequelae, including acute coronary syndromes (ACS), ischemic stroke, peripheral arterial disease, heart failure, and sudden cardiac death.^{1,2} Despite the introduction of very effective lipid-modifying drugs, hyperlipidemia is still poorly controlled and treated worldwide.^{3,4}

According to the World Health Organization, approximately 7.2 million people worldwide die each year from coronary artery disease (CAD).⁵ CAD is the most common cause of death in Europe, and ACS is a very common complication of this disease. Unstable angina and non-ST-segment elevation myocardial infarctions (MIs) are responsible for approximately 2.5 million hospital admissions worldwide and are a major cause of mortality and morbidity in Western countries.⁶ On the basis of 2006 mortality data, nearly 2300 Americans die of cardiovascular disease each day, which results in 840,000 deaths annually. Every year, 785,000 Americans experience their first MI, and MIs recur in approximately 470,000.⁷ More than 100,000 Polish citizens sustain an incident MI every year.^{2,8} These figures demonstrate the importance of continuing to place great emphasis on cardiovascular disease prevention, which should be one of the most important priorities for all cardiovascular societies and an area for strong, sustained international cooperation.

The all-Polish epidemiological registries—NATPOL PLUS (2002)⁸ and WOBASZ (2005)⁹—demonstrated that the majority of Polish citizens have dyslipidemia on the basis of the lipoprotein cut points used in Europe. Researchers from NATPOL PLUS found an increased total cholesterol (TC) of 190 mg/dL or greater (5 mmol/L) in 59.5% of men and 62% of women. The equivalent figures in the WOBASZ registry were 67% (men) and 64% (women), respectively. Similarly, low-density lipoprotein (LDL) cholesterol of 115 mg/dL or greater (3 mmol/L) occurred in 55% (men) and 55% (women) in NATPOL PLUS, and 60% (men) and 55% (women) in the WOBASZ registry.^{8,9} Low levels of serum high-density lipoprotein (HDL)

cholesterol of less than 40 mg/dL (1.0 mmol/L) were found in 17% and 15% of men in the NATPOL PLUS and WOBASZ registries, respectively. In women, the incidence of HDL levels of less than 46 mg/dL (1.2 mmol/L) was 17% in both the NATPOL PLUS and WOBASZ registries.^{8,9} In another Polish trial published in 2006, it was shown that lipid disorders were the most prevalent risk factor for cardiovascular events in secondary prevention, as hyperlipidemia was detected in 74.6% of patients, and second, after arterial hypertension, in primary prevention (45.1%).¹⁰ The authors also showed that 83% patients with ACS did not achieve a level of LDL cholesterol less than 100 mg/dL (2.6 mmol/L) with therapy, and even fewer achieved the target of less than 70 mg/dL (1.8 mmol/L).¹⁰

In September 2011—the findings of the largest study ever carried out on the elderly population (>65 years of age) of Poland—PolSenior registry—were presented.¹¹ Hypercholesterolemia was demonstrated in 56% of men and 66% of women. Unexpectedly, the worst outcomes were observed in relatively younger patients 65 to 69 years of age, and older people (>70 years) had relatively lower lipid levels.¹¹ The PolSenior data were compared with the data from the NATPOL 2002 registry.^{8,12} Patients with elevated TC had decreased in number by about 9%, but 61% of patients still met diagnostic criteria for hypercholesterolemia, with as many as 33.5% patients between the ages of 18 and 34.¹² What was even more alarming was the observation that, of 18 million Polish citizens with hypercholesterolemia, 10.8 million (65%) were not aware of the diagnosis.¹² There was also a trend towards a decrease in the number of patients with HDL cholesterol levels greater than 46 mg/dL (1.2 mmol/L) in women and 40 mg (1.0 mmol/L) in men. In men the decrease was from 56% in 2002 to 50.1% in 2011,^{8,12} likely attributable to an increase the incidence of metabolic syndrome/insulin resistance. Mortality attributable to CAD decreased during the period 1991 to 2005, with a nationwide reduction in TC being directly attributable for 39% of this decrease.¹²

Similar trends have also been report in other European countries as well as in the United States.^{13,14} The recently

completed EURIKA trial enrolled 7641 patients from 12 European countries. The subjects were older than the age of 50 years with no evidence of CAD and had at least one risk factor for CAD. It was demonstrated that in treated patients with lipid disorders, a TC level less than 190 mg/dL (5 mmol/L) and LDL-C less than 115 mg/dL (3 mmol/L) occurred only in 41.2% patients.¹⁵ One-third of patients on lipid-lowering therapy were in the high-risk group for cardiovascular events.¹⁵

Given these findings, there is considerable need for widespread integrated actions aimed at improving both patient awareness and the appropriate use of lipid-modifying therapy. These initiatives should also address the need to improve long-term patient adherence and reduce therapeutic inertia among health care providers. In Poland, as well as in many European countries, therapeutic inertia is a very important problem, and results from a lack of sufficient knowledge on the management of patients with lipid disorders. As in other nations, there is also insufficient collaboration between specialists and primary care physicians in Poland.

For these reasons, the Polish Lipid Association (PoLA) was founded in September of this year. It is an affiliated partner of one of the leading lipid societies in the world, the National Lipid Association (NLA). Professor Michael Davidson—the past President of NLA and Christopher Seymour—the Executive Director of NLA—have played the greatest role in the process of founding the association and in the discussions and preparations, which have been going on since 2009. The 1st Annual Congress of PoLA, took place in Warsaw in September 2011, was also organized with a great deal of help from Professor Davidson and Chris Seymour. More than 300 delegates took part in the congress and listened to some of the greatest specialists in lipid disorders therapy giving lectures on the subject of dyslipidemias management. Speakers included Prof. Davidson (Chicago, IL, USA), Prof. Mikhailidis (London, UK), Prof. Pencina (Boston, MA, USA), through Prof. von Haehling (Berlin, Germany) and Dr. Niki Katsiki (Thessaloniki, Greece). Also participating and giving talks were the best Polish experts in the field, including Prof. Cybulska, Prof. Naruszewicz, Prof. Grajek, Prof. Filipiak, Prof. Grodzicki, Prof. Guzik, and Prof. Broncel. Christopher Seymour gave a lecture on the presumption of future co-operation between NLA and PoLA.

The congress showed that there is a large interest in the science and clinical challenges of diagnosing and treating lipid disorders in Poland. More than 200 physicians and researchers have applied for PoLA memberships. Our aims and ambitions go beyond Poland, and we are planning to encourage our colleagues from other European countries, especially from Central and Eastern Europe, to collaborate with PoLA and create a real link with NLA. These organizations will join the efforts for optimal management of patients with lipid disorders.

The main aims of NLA and PoLA are to increase the awareness of physicians of the magnitude of the problem and

improve knowledge on the management of patients afflicted with the many forms of dyslipidemia. There is still an enormous task ahead of us. It seems that only joint international research, continuous education, clear recommendations, and the development of clinical lipidologists will improve the current situation in Poland, Europe, and in the world. PoLA is going to be an open society and would like to invite all the societies and people who take care of lipid management to join. From the start of the society we have been cooperating with the Polish Association on Atherosclerosis Research and the American Society of Preventive Cardiology and would like to invite all similar societies in Poland, Europe, the United States, and other nations of the world to work together to address lipid disorders, which are a major cause of cardiovascular morbidity and mortality in people of all races and ethnic groups.

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