

# Characteristics of patients with coronary artery disease managed on an outpatient basis in the population of Poland. Results of the multicentre RECENT trial

Waldemar Banasiak<sup>1</sup>, Robert Pociupany<sup>2</sup>, Arleta Wilkins<sup>2</sup>, Piotr Ponikowski<sup>1</sup>

<sup>1</sup> Heard Disease Centre, 4<sup>th</sup> Military Clinical Hospital, Wrocław, Poland

<sup>2</sup> Servier Polska, Warsaw, Poland

## Abstract

**Introduction:** Comprehension of clinical characteristics and therapeutic methods in patients with coronary artery disease (CAD) is mandatory for the introduction of successful prevention.

**Aim:** The aim of the multicentre RECENT trial carried out in Poland in 2005 was to gather comprehensive information regarding individuals with CAD treated by specialists as well as by general practitioners on an outpatient basis. In this report, clinical characteristics of the Polish patient population with confirmed CAD are presented.

**Methods:** A representative group of 215 general practitioners and 67 specialists participated in this study. They collected information about 2593 patients with CAD and filled-in a specially designed questionnaire.

**Results:** Coronary artery disease was confirmed predominantly based on a history of myocardial infarction (50.1%), followed by positive electrocardiographic stress test (38.8%), history of typical angina in subjects at the age of >60 years (36.4%), history of previous acute coronary syndrome (29.0%), PCI (22.1%) or CABG (14.3%) or positive coronary angiography (17.6%). In patients with diagnosed stable CAD, 44.6% were women and the mean age was 65.0±9.8 years. Among patients with a history of hypertension (78.0%), only 34.0% had blood pressure within the normal range. History of dyslipidaemia was positive in 57.6% of patients. Normal LDL cholesterol concentrations (<3.36 mmol/L) were found in 56.7% of patients. A family history of CAD had 17.3% of subjects, 23.5% had previously detected diabetes mellitus and 11.0% were active smokers at the time of study enrolment. Overweight or obesity both in men and women was found in 79.3% of patients while metabolic syndrome (diagnosed according to NCEP ATP III criteria) was found in 31.3%. The following comorbidities were detected: 34.3% presented symptoms of congestive heart failure, 32.1% had rhythm or conduction disturbances (most commonly atrial fibrillation – in 19.0% of cases). Previous stroke was noted in 4.7% of patients with CAD and transient ischaemic attack in 5.5%. Peripheral artery disease was observed in 9.9% of CAD patients, whereas asthma or COPD – in 9.0%.

**Conclusions:** The results of the RECENT trial are representative for the CAD patient population managed on an outpatient basis in our country. They suggest that CAD in the Polish population is rather advanced, and indicate still insufficient use of imaging modalities (particularly coronary angiography) and significant prevalence of risk factors throughout this population.

**Key words:** stable ischaemic heart disease, risk factors

Kardiologia Polska 2007; 65: 132-140

## Introduction

European and US data indicate that cardiovascular disease (CVD), particularly coronary artery disease (CAD), is the leading cause of morbidity and mortality of middle-aged and older individuals [1-4]. The costs

associated with CAD treatment are enormously high. According to estimates in the US alone approximately 130 billion US dollars are spent each year and undoubtedly the costs will increase in the future [5, 6].

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### Address for correspondence:

prof. Piotr Ponikowski, Klinika Kardiologii, Ośrodek Chorób Serca, 4. Wojskowy Szpital Kliniczny, ul. Weigla 5, 50-089 Wrocław, e-mail: piotrponikowski@4wsk.pl

**Received:** 26 June 2006. **Accepted:** 30 October 2006.

*Study received financial support from a scientific grant of Servier Poland.*

The most common form of CAD is stable angina, which affects millions of individuals in Europe and the US, including over one million Poles alone [7]. Contrary to the acute coronary syndromes that have been in the focus of interest in the last few years, there are limited data on clinical characteristics and therapeutic options in patients with stable CAD. Comprehension of these data is essential for the introduction of complex prevention and reduction of acute coronary syndrome incidence. The reports published so far have indicated significant discrepancies between the current guidelines and daily clinical practice in the management of patients with stable CAD [8-11]. They were disclosed at the level of both general practitioners and specialists, either on an outpatient basis or in the hospitals.

The purpose of the multicentre RECENT trial carried out in Poland in 2005 under the auspices of the Polish Cardiac Society was to gather comprehensive information on the patient population with stable CAD managed by both specialists and general practitioners on an outpatient basis. This paper presents clinical characteristics of the outpatient patient population with confirmed CAD in Poland.

## Methods

### Selection of physicians participating in the study

In this study, the scheme of stratified triple-staged draw of general practitioners and specialists was employed in order to select a national representative group. In the case of general practitioners, 1<sup>st</sup> degree draw subjects were the health service institutions (zakład opieki zdrowotnej, ZOZ) of the primary health care (podstawowa opieka zdrowotna, POZ), while 2<sup>nd</sup> degree draw subjects were the primary health care practitioners. Regarding specialists, 1<sup>st</sup> degree draw subjects were cardiologists employed in outpatient clinics (either in hospitals or in primary health care institutions) but 2<sup>nd</sup> degree draw subjects were specialists in cardiology or 2<sup>nd</sup> degree specialists of internal medicine. The third stage of draw was a selection of patients with confirmed CAD.

The subjects of the 1<sup>st</sup> degree draw were the primary health care institutions and the cardiology outpatient clinics found on the internet site of [www.rejestrzoz.gov.pl](http://www.rejestrzoz.gov.pl). A draw of institutions was performed independently in each province in a uniform manner (i.e. 15 primary health care institutions in each province). Then, a procedure of weighting was carried out in order to assure the representativeness of institutions, i.e. to keep the number of physicians proportional to the number of inhabitants that a given

province contributed to the general population of Poland. This enabled the obtained structure of the primary health care institutions to be adjusted to the real one. At the second stage of draw, one physician was drawn out of all doctors employed in a given institution (i.e. out of the general practitioners and specialists in familial, internal and occupational medicine) and an additional one as a specialist out of all cardiologists and specialists with 2<sup>nd</sup> degree specialisation in internal medicine practicing in cardiology outpatient clinics.

Prior to study initiation, a selection of 240 general practitioners and 80 specialists out of the cardiology outpatient clinics was planned prospectively.

### Selection of patients

To assure the group's representativeness in the study, no preselection was employed and patients with confirmed CAD diagnosis (according to the criteria listed below) who were treated for at least 12 months were enrolled regardless of the reason for the visit to the general practitioner or specialist office. Each physician was obliged to enrol 10 consecutive patients within 14 days of the recruitment period. Patient representativeness was controlled based on additional information on the reason for the visit, the pattern of medical visits throughout the last 12 months and the total number of all patients with established diagnosis of CAD who were cared for by the selected physician.

The diagnosis of CAD was established in the presence of at least one of the following:

- 1) typical angina symptoms in patients older than 60 years,
- 2) previous myocardial infarction (MI) (confirmed by the hospital discharge forms, electrocardiographic and/or echocardiographic examination),
- 3) acute coronary syndrome with or without ST segment elevation in the past (confirmed by the hospital discharge forms),
- 4) coronary artery bypass grafting (CABG) in the past,
- 5) previous percutaneous coronary intervention (PCI) (confirmed by the hospital discharge forms),
- 6) significant stenosis of the coronary artery in the coronary angiography (left main stem stenosis  $\geq 50\%$  and/or  $\geq 70\%$  of the remaining coronary arteries),
- 7) clinically and/or electrocardiographically positive ECG stress test (supported by existing examination documentation),
- 8) positive radionuclide cardiac stress test (supported by existing examination documentation),
- 9) positive stress echocardiography test (supported by existing examination documentation).

No exclusions criteria were employed in this study.

### Data collection and analysis

The study consisted of filling in a questionnaire including information listed below:

- 1) specialisation of the physician,
- 2) criteria of CAD diagnosis confirmation,
- 3) clinical data and examination results including:
  - a) demographic data,
  - b) information on concomitant disorders and a profile of CVD risk factors,
  - c) information on severity of angina according to the Canadian Cardiovascular Society classification (CCS) and the number of chest pain episodes or doses of nitroglycerine used within the week preceding the visit,
  - d) physical examination,
  - e) laboratory tests carried out within the last 6 months (concentration of total cholesterol, HDL- and LDL-cholesterol fractions, triglycerides, creatinine, haemoglobin and haemoglobin HbA<sub>1c</sub>),
- 4) current medical therapy,
- 5) pharmaco-economic data.

Detailed information on demographic data, the results of the history analysis and the physical examination, comorbidities, as well as the definitions of CVD risk factors are presented in Attachment 1. Comprehensive analysis of the therapeutic options and CAD pharmaco-economics will be the subjects of future publications.

All patients participating in this study received "Information for the Patient" and expressed written informed consent. The questionnaires were filled in anonymously without providing any personal data of patients.

This study was conducted under the auspices of the Polish Cardiac Society and received financial support by a scientific grant from Servier Poland. Final analysis of the data was carried out by Pracownia Badań Społecznych in Sopot.

### Statistical analysis

Data were transformed and statistically analysed with the use of computer statistical software SAS v 8.2 (SAS Institute, Cary, NC, USA).

Patient characteristics data were presented using methods of descriptive statistics. Quantitative variables with quasi-normal distribution were expressed as mean with standard deviation while variables with an obvious asymmetric distribution were expressed as median and range. For qualitative variables, relative frequencies according to class were expressed.

All analyses were performed using adequately chosen weights, taking into account the draw probe scheme. This enabled us to estimate the representativeness of the Polish patient population with established diagnosis of CAD that has been treated by general practitioners as well as by specialists on an outpatient basis for at least 12 months.

### Results

In the study performed between 20.06.2005 and 01.07.2005, 215 general practitioners and 67 specialists participated, which accounts for 90% and 84% of the previously planned number of physicians, respectively. This study involved 2593 patients, 81% out of a planned 3200, including 1977 (82%) out of a planned 2400 treated in primary health care institutions and 616 (77%) out of a planned 800 treated in cardiology outpatient clinics. Symptoms of CAD were the predominant reason for visits in 74.2% of patients.

#### Method of CAD diagnosis confirmation and severity assessment

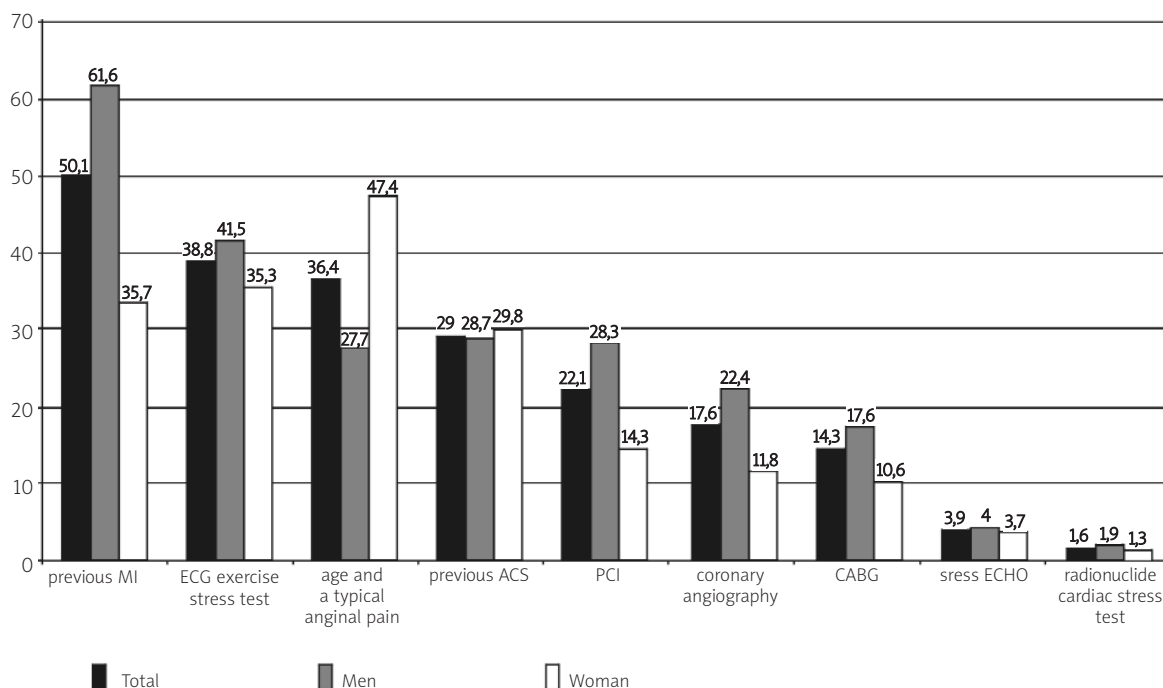
Diagnosis of CAD was most commonly confirmed on the basis of previous MI (in more than half of patients), followed by positive electrocardiographic exercise stress test, a typical history of anginal chest pain in individuals over the age of 60 years, previous acute coronary syndrome without MI, documented PCI or CABG in the past and positive coronary angiography. An echocardiographic stress test and radionuclide cardiac stress test contributed to CAD confirmation in a very small percentage of patients (Figure 1). Median duration of CAD was 6 years (maximum 48 years).

The degree of clinical severity of CAD symptoms in the majority of patients was confined to CCS classes 1 or 2 (37.8% and 48.1%, respectively), 12.7% had angina symptoms classified as class 3 according to CCS definition, and 1.4% had class 4 symptoms. More than half of patients (58.9%) had angina episodes within the last 3 months. Symptoms of angina throughout the week directly preceding the visit were observed in 40.8% of patients. The median number of anginal chest pain episodes was 2 (range from 1 to 30).

#### Demographic data

**Gender:** women accounted for 44.6% and men for 55.4% of patients with established diagnosis of stable CAD.

**Age:** the mean age of patients was 65.0±9.8 years (range from 19 to 102 years); in the case of men – 63.1±9.8 years and women – 67.5±9.4 years. Among



Abbreviations: ACS – acute coronary syndrome, PCI – percutaneous coronary intervention, CABG – coronary artery by-pass grafting, ECHO – echocardiography

Figure 1. Methods of CAD diagnosis confirmation

both men and women, the majority of patients were aged between 56 and 75 years (59.3% and 63.3%, respectively); 27.6% and 14.7% were below 55 years, while 13.1% and 22.0% of men and women, respectively, were more than 75 years old.

**Marital status:** 73.3% of the examined subjects were married, 20.4% were widowers/widows, 2.8% divorced and 3.5% singles.

**Education:** most of the patients had technical or secondary education (26.7% and 29.6%, respectively); individuals with incomplete university and with university education accounted for 10.7% while those with elementary education accounted for 33.0% of all patients.

**Place of living:** Just over one third of the examined subjects (35.4%) lived in the countryside, 20.5% in towns of 50 000 inhabitants or less, 22.8% in towns with 50 to 200 thousand inhabitants, and 21.3% in cities of ≥200 thousand inhabitants.

**Occupation:** a significant majority of patients (86.9%) were occupationally inactive (including 55.3% pensioners, 29.2% disability pensioners and 2.4% unemployed).

**Profile of risk factors and comorbidities**

Mean systolic blood pressure (BP) measured in the physician’s office was 135.2±17.5 mmHg; mean diastolic blood pressure was 81.2±10.2 mmHg. History of hypertension was noted in 78.0% of our patients with CAD (median duration 9 years, maximum 46 years). In this group recommended values of BP (<130/80 mmHg in individuals with diabetes mellitus or renal failure and <140/90 mmHg in the others) were found only in 34.0% of patients.

At the physical examination, the mean heart rate at rest was 73.1±9.0 bpm; in 57.1% of individuals an increased heart rate (>70 beats per minute) was noted.

History of dislipidaemia was present in 57.6% of pts. Most study patients (76.8%) had at least one component of lipid profile assessed within 6 months preceding study examination, including 76.4% who had total cholesterol concentration test, 51.2% LDL cholesterol, 55.2% HDL cholesterol and 63.1% triglycerides measured (mean concentrations were 5.42±1.31 mmol/L, 3.24±1.06 mmol/L, 1.32±0.47 mmol/L and 1.86±1.06 mmol/L, respectively). Total cholesterol concentration within the normal range

(<5.17 mmol/L) was noted in 44.4% of examined individuals, LDL cholesterol (<3.36 mmol/L) in 56.7%, HDL cholesterol (>1.03 mmol/L in men and 1.29 mmol/L in women) in 65.1% and triglycerides (<1.7 mmol/L) in 54.1%, respectively.

Family history of premature cardiovascular deaths, i.e. deaths at age of less than 55 years in men and at age of less than 65 years in women, was found in 17.3% of our patients.

Diabetes mellitus was previously diagnosed in 23.5% of patients (of median duration 6 years, maximum 40 years); type 2 diabetes was detected in 96.2% of them. Eleven percent of examined subjects were active smokers.

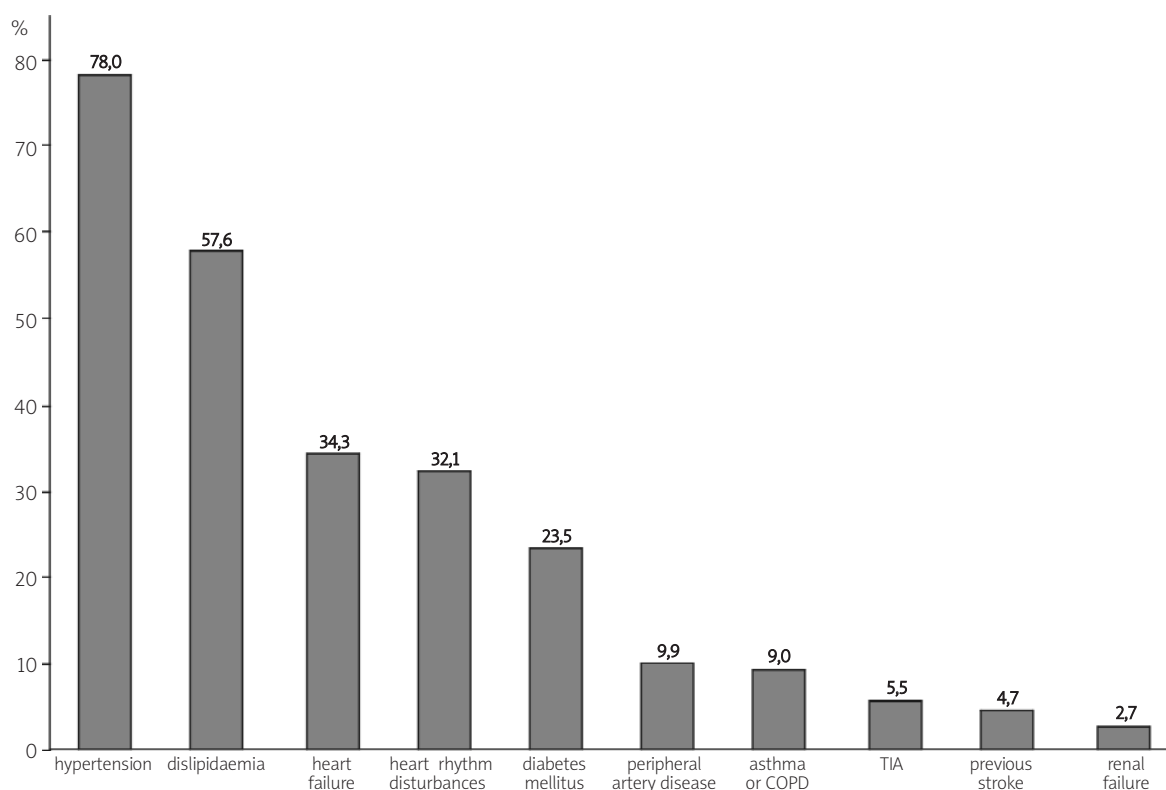
Mean height and body weight of examined male individuals was 171.5±5.7 cm and 83.4±12.6 kg respectively, and of female subjects – 160.1±5.7 cm and 74.3±12.6 kg, respectively. Average BMI was 28.3±4.0 kg/m<sup>2</sup> in men and 29.0±4.8 kg/m<sup>2</sup> in women. Waist circumference was 99.3±11.5 cm in men and 94.5±12.7 cm in women. Overweight (25 kg/m<sup>2</sup> ≤ BMI <30 kg/m<sup>2</sup>) was noted in 49.1% of male and 42.5% female patients, while obesity (BMI ≥30 kg/m<sup>2</sup>) was noted in 30.2% of men and 36.8% of women, respectively.

Among patients with CAD, 31.3% (38.0% women and 26.1% men) fulfilled the modified criteria for metabolic syndrome according to NCEP ATP III recommendations (Attachment No. 1).

Prevalence of comorbidities in the examined population is presented in Figure 2.

## Discussion

In 2005, the most recent data regarding clinical characteristics and therapeutic methods utilised in patients with stable CAD in Europe (Euro Heart Survey) were published [12, 13]. The principal differences between the RECENT trial and the aforementioned study were with respect to the patient recruitment criteria and method of physician selection. The Euro Heart Survey involved patients who were referred for ambulatory cardiological services with the first presentation of CAD, or a subsequent one, but only if they had not been consulted by a cardiologist within the last 12 months. Patients after previous PCI and CABG procedures or MI within the last 12 months were excluded from the study [12, 13]. In the Polish ATP trial (Angina Treatment Pattern) only patients with stable CAD treated by primary health care practitioners were



Abbreviations: COPD – chronic obstructive pulmonary disease, TIA – transient ischaemic attack

**Figure 2.** Prevalence of comorbidities in the examined population

evaluated and a confirmation of CAD diagnosis based on the objective criteria of CAD was not mandatory [10]. Contrary to this study, in the RECENT study a multi-staged physician draw was employed to select a representative population of specialists and primary health care practitioners who nowadays take care of patients with CAD in Poland. The only enrolment criterion in the RECENT trial was the treatment of CAD confirmed by at least one of the commonly accepted diagnostic modalities, throughout a period no shorter than 12 months. Contrary to other trials [8, 12, 13], no specific study exclusion criteria were used.

Female patients accounted for only slightly less than half (45%) of the subjects treated in Poland because of CAD. Some authors reported a similar gender contribution to CAD patients treated on an outpatient basis [10, 12-15], although it was not supported in the large clinical trials, which in the significant majority involved men [16, 17].

Patients with CAD, treated in outpatient institutions, are usually middle-age persons (61% of a total population were aged between 56 and 75 years). It should be emphasised that nowadays in Poland, like in Western Europe countries, the number of elderly CAD patients is increasing gradually (17% of patients in the RECENT trial were older than 75 years). Although those patients are usually stable, they carry a significant burden of multiple concomitant disorders and they may pose a difficult problem for the primary health care practitioner as well as for the cardiologist.

In the Polish population managed on an outpatient basis, CAD usually lasted for many years, the majority of patients had had an incident of acute myocardial ischaemia in the past, and additionally 14% underwent CABG. Compared to the populations of other trials, this rate is significantly higher (only 4% of Euro Heart Survey patients had a history of MI, in EUROASPIRE II – 29% and in ATP – 37% of examined subjects). Moreover, approximately 60% of individuals complained of angina symptoms within the last 3 months, and over 40% in the week preceding study enrolment (in the Euro Heart Survey angina pain within the last one month was noted in only 2% of patients). In this context, attention must be paid to the relatively small number of diagnostic examinations carried out in our country – exercise stress test in 39% of patients, invasive examination with possible PCI procedure in approximately one fourth of patients. Reviewing the data from the Euro Heart Survey (exercise stress test performed in 76% and diagnostic coronary angiography in 41%) awareness of the necessity and usefulness of diagnostic imaging modalities at each stage of CAD seems to be still insufficient in Poland [18, 19].

Hypertension was detected in 78% of patients (compared to 62% in the Euro Heart Survey, 50% in the EUROASPIRE II trial and 58% in the ATP study), and satisfactory control of pressure was achieved only in one third of them. This is consistent with the other reports indicating that adequate control of this most common risk factor still remains very poor [20, 21].

Taking into account the high incidence of hyperlipidaemia (58% of patients), the need for better understanding of the rationale for monitoring of lipid lowering therapy efficacy in patients with stable CAD, particularly measurement of LDL cholesterol concentration, must be stressed [22-24]. Only 51% of our patients had this laboratory analysis done within the 6 months preceding study examination.

Another important issue in the Polish CAD patient population is obesity or overweight, noted approximately in 80% of the RECENT study subjects. Similar findings were revealed previously in the Polish ATP study as well as in the EUROASPIRE II trial, where only 27% and 21% patients respectively had body mass index within the normal range [8]. Metabolic syndrome [25], currently recognised as one of the most dangerous risk factors of CAD and of its complications, was found in 26% of men and 38% of women. It is the first such finding in the large population of CAD patients in Poland.

A role of increased heart rate is being suggested among newly discovered risk factors of CAD and CVD complications [26]. This predictive relationship is of paramount importance in the population of CAD patients [27]. Thus it must be highlighted that the average heart rate at rest was 73 bpm. In almost 60% of patients the resting heart rate exceeded 70 beats per minute in spite of  $\beta$ -blocker use in a significant majority of subjects (80%).

Concluding this part of the study, it must be noted that in the Polish CAD patient population common coexistence of typical CVD risk factors is observed. This issue is of importance in the context of the intensity of secondary prevention activities. The EUROASPIRE II trial results also pointed to the unhealthy lifestyle and amazingly high risk factor burden in many European countries among individuals with detected CAD that have not been changed throughout the last 5 years [8].

Prevalence of comorbidities is similar to that observed in other epidemiological studies. Attention should be paid to the presence of heart failure symptoms in one third of patients that may be overestimated as they are non-specific, and their consistency with eventually established diagnosis of heart failure is only about 30%. Adopting even such approximated estimations it may be judged that 10% of the CAD population in Poland presents heart failure.

## Conclusions

In conclusion, findings of the RECENT trial provide insight into the CAD population treated on an outpatient basis in our country. They indicate the marked progression of CAD, still insufficient employment of imaging modalities (particularly coronary angiography) and a significant prevalence of CVD risk factors in this group of patients.

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## Attachment No.1

### Information obtained in the Questionnaire of RECENT trial and definitions of risk factors

#### CLINICAL SECTION

**1. Demographic data.** Gender, age, living place (country, town <50 000 inhabitants, town 50 000 to 200 000 inhabitants, cities >200 000 inhabitants), professional status (non-working pensioner, non-working disability pensioner, part-time employed pensioner/disability pensioner, active professionally, unemployed, student), marital status (married, single, divorced or separated, widower/widow), education (incomplete elementary, elementary, technical, secondary, incomplete university, university).

**2. Risk profile and concomitant disorders.** Premature deaths due to CV reasons among relatives (at the age of below 55 years old in case of father and 65 years in mother), active smoking and the results of laboratory test performed within the last 6 months (total cholesterol, LDL cholesterol fraction, HDL cholesterol fraction, triglycerides, creatinine, haemoglobin, glycated haemoglobin concentrations).

The following values of lipid profile were accepted as normal: total cholesterol  $\geq 5.17$  mmol/L ( $\geq 200$  mg/dL), LDL cholesterol  $\geq 3.36$  mmol/L ( $\geq 130$  mg/dL), HDL cholesterol: for men <1.03 mmol/L (<40 mg/dL) and for women <1.29 mmol/L (<50 mg/dL), triglycerides  $\geq 1.7$  mmol/L ( $\geq 150$  mg/dL).

Metabolic syndrome was defined (according to NCEP ATP III criteria) [28] as the presence of at least three of the following risk factors: waist circumference  $\geq 102$  cm in men or  $\geq 88$  cm in women, triglycerides  $\geq 1.7$  mmol/L (150 mg/dL), HDL-cholesterol <1.03 mmol/L (40 mg/dL) in men or <1.29 mmol/L (50 mg/dL) in women, systolic blood pressure  $\geq 130$  mmHg or diastolic blood pressure  $\geq 85$  mmHg, history of type 2 diabetes mellitus.

Comorbidities and cardiovascular complications (history): hypertension, heart failure, stroke, transient ischaemic attack (TIA), peripheral artery disease, type I diabetes mellitus, type II diabetes mellitus (in analyses diabetes without specified type was assumed to be of type 2).

**3. Heart rhythm disturbances** were classified as paroxysmal or persistent atrial fibrillation, sinoatrial block, I to III degree atrioventricular block, premature ventricular extrasystolic beats, ventricular tachycardia, resuscitated sudden cardiac death.

**4. Data derived from physical examination.** Height, weight, waist circumference, systolic blood pressure (SBP), diastolic blood pressure (DBP) (pressure was

measured at the day of the visit in a sitting position following 5-minute rest), heart rate.

In the group of patients with history of hypertension, blood pressure was defined as normal <140/90 mmHg and in patients with diabetes mellitus or renal failure as <130/80 mmHg.

BMI ( $\text{kg}/\text{m}^2$ ) was also calculated: overweight was diagnosed as  $25 \text{ kg}/\text{m}^2 \leq \text{BMI} < 30 \text{ kg}/\text{m}^2$  and obesity as  $\text{BMI} \geq 30 \text{ kg}/\text{m}^2$

**5. Patient clinical profile.** Clinical progress of stable CAD according to Canadian Cardiac Society classification (CCS) and functional heart failure classification according to NYHA criteria (New York Heart Association).

Patients were also asked about presence and characteristics of angina symptoms within the 3 months preceding examination, the number of chest pain episodes throughout the last week and the number of nitroglycerine doses used by the patient during the week prior to examination.

#### PHARMACOECONOMIC SECTION

(covering the period of 365 days preceding visit)

1. Type and a number of consultations within the last year (with primary health care practitioners, internist, cardiologist, cardiac surgeon, diabetologist, radiologist, psychiatrist, specialist in rehabilitation and others).

2. Type and a number of prescribed laboratory and biochemical tests within the last year (basic haematology, general urine test, electrolytes, proteinogram, glucose, blood urea nitrogen, uric acid, creatinine, total cholesterol, cholesterol fractions, triglycerides, fibrinogen, homocysteine, CRP, HbA<sub>1c</sub>, AspAT, ALAT, total bilirubin, others).

3. Form and number of prescribed additional examinations and therapeutic procedures within the last year (electrocardiogram, ambulatory electrocardiographic monitoring, chest X-ray, 24-hour ambulatory blood pressure monitoring, electrocardiographic exercise stress, dobutamine stress echocardiography, transthoracic and/or transesophageal echocardiography, coronary angiography, percutaneous angioplasty with or without bare-metal or drug-eluting stent implantation, coronary artery bypass grafting, others).

4. Form and number of emergency aid services during the last year (call for ambulance, call for "R" ambulance and treatment in the hospital emergency room).

5. Type and number of hospital admissions within the last one year.

6. Data regarding health resort therapy, medical certificates of temporary work disability, disability benefits or rehabilitation allowance during the last year.



# Charakterystyka chorych leczonych z powodu choroby niedokrwiennej serca w leczeniu otwartym w populacji polskiej. Wyniki wieloośrodkowego badania RECENT

Waldemar Banasiak<sup>1</sup>, Robert Pociupany<sup>2</sup>, Arleta Wilkins<sup>2</sup>, Piotr Ponikowski<sup>1</sup>

<sup>1</sup> Ośrodek Chorób Serca, 4. Wojskowy Szpital Kliniczny, Wrocław

<sup>2</sup> Servier Polska, ul. Jana Kazimierza 10, Warszawa

## Streszczenie

**Wstęp:** Znajomość charakterystyki klinicznej oraz sposobów leczenia osób z chorobą niedokrwinną serca (CAD) jest konieczna dla wprowadzenia skutecznej prewencji.

**Cel:** Celem wieloośrodkowego badania RECENT prowadzonego w Polsce w roku 2005 było uzyskanie szerokiej informacji na temat osób z CAD będących pod opieką specjalistów i lekarzy pierwszego kontaktu w ramach leczenia otwartego. W opracowaniu przedstawiono charakterystykę kliniczną polskiej populacji pacjentów z potwierdzoną CAD.

**Metodyka:** W badaniu wzięła udział reprezentatywna próba 215 lekarzy pierwszego kontaktu oraz 67 lekarzy specjalistów, którzy uzyskali informacje o 2593 chorych z CAD.

**Wyniki:** Najczęściej CAD potwierdzano na podstawie przebytego zawału serca (50,1%), wyniku elektrokardiograficznej próby wysiłkowej (38,8%), typowego wywiadu dławicowego u osób po 60. roku życia (36,4%), przebycia ostrego zespołu wieńcowego (29,0%), wykonanego zabiegu PCI (22,1%) lub CABG (14,3%) oraz wyniku koronarografii (17,6%). W populacji osób z potwierdzoną stabilną CAD kobiety stanowiły 44,6%, średni wiek chorego wynosił 65,0±9,8 lat. U 78,0% chorych stwierdzono nadciśnienie tętnicze w wywiadzie, w tej grupie obecnie prawidłowe wartości ciśnienia tętniczego odnotowano u 34,0% osób. Zaburzenia lipidowe w wywiadzie rozpoznano u 57,6% chorych. Prawidłowy poziom cholesterolu LDL (<3,36 mmol/l) stwierdzono u 56,7% chorych. Obciążenie rodzinne podawało w wywiadzie 17,3% chorych, 23,5% miało w wywiadzie rozpoznaną cukrzycę, zaś 11,0% aktualnie paliło tytoń. Nadwagę lub otyłość stwierdzono u 79,3% zarówno wśród mężczyzn, jak i kobiet, zespół metaboliczny (wg kryteriów NCEP ATP III) u 31,3% chorych. Spośród chorób współistniejących – 34,3% chorych podawało objawy niewydolności serca, u 32,1% stwierdzono zaburzenia rytmu i przewodzenia (najczęściej migotanie przedsionków – u 19,0%). Udar mózgu przebyło 4,7% pacjentów z CAD, a epizod przejściowego niedokrwienia ośrodkowego układu nerwowego 5,5%. Choroby naczyń obwodowych stwierdzono u 9,9% pacjentów z CAD, a astmę lub przewlekłą obturacyjną chorobę płuc (POCHP) u 9,0%.

**Wnioski:** Wyniki badania RECENT są reprezentatywne dla populacji leczonej ambulatoryjnie z powodu CAD w naszym kraju. Wskazują na znaczne zaawansowanie CAD, wciąż zbyt małe wykorzystywanie badań obrazowych (zwłaszcza koronarografii) oraz znaczne rozpowszechnienie czynników ryzyka u tych chorych.

**Słowa kluczowe:** stabilna choroba niedokrwienności serca, czynniki ryzyka

Kardiologia Pol 2007; 65: 132-140

## Adres do korespondencji:

prof. dr hab. n. med. Piotr Ponikowski, Klinika Kardiologii, Ośrodek Chorób Serca, 4. Wojskowy Szpital Kliniczny, ul. Weigla 5, 50-089 Wrocław, e-mail: piotrponikowski@4wsk.pl

Praca wpłynęła: 26.06.2006. Zaakceptowana do druku: 30.10.2006.

Badanie finansowano z grantu naukowego przyznanego przez firmę Servier Polska.