

PECULIARITIES OF THE COURSE OF CARDIOVASCULAR DISEASES IN PERSONS OF ELDERLY AND SENILE AGE

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In the article, features of clinical process of diseases of circulatory system in elderly patients in Almaty district (Almaty) were analyzed. Retrospective examination of elderly patients was conducted during 2012 year in comparison with 2013. The result of this examination was as follows: DCS in elderly people is characterized insignificant symptoms and latent process with fast progress of complicating circumstance. That is why it is difficult to diagnose DCS at an early stage and it is necessary to introduce screening programs for gerontological service at a pre-hospital stage.

Keywords: diseases of circulatory system, elderly patients, clinical process, screening, prophylactic programs

One of the most actual issues of Public Health of the Republic of Kazakhstan is the growth of diseases of the circulatory system (DCS) among persons of elderly and senile age. In the dynamics from 2007 to 2009 the incidence rate of DCS per 100 thousand of the adult population has increased by 1,1 times. The main cause of mortality of the elderly population from DCS is arterial hypertension (AH), which has increased by 1,4 times [1, 2].

In this regard, the priority is the quality of rendered medical care for gerontological population, including pre hospital stage.

The aim of the study was to study the peculiarities of the clinical course of DCS among elderly patients in one of districts of Almaty.

Materials and methods of research

We have made a complete statistical analysis of statistical cards of admissions of elderly population of Almaty district attached to the GCE "Clinic of Great Patriotic War participants" for the period from 01.01.2012 to 31.12. 2012. In total there were registered 15,424 patients with DCS that made 51,3% of the total number. The leading place made the patients (7480–48,5%) with diseases characterized by high blood pressure, then followed by ischemic heart disease (IHD) and vascular diseases – 5796 (37,6%). 3392 patients with angina (58,5%), acute myocardial infarction (AMI) – 12 (0,2%), paroxysmal tachycardia – 4 (0,07%), other conduction disorders – 2 (0,03%), impaired heart rate – 195 (3,4%), chronic heart failure (CHF) – 406 (7%), cerebrovascular diseases – 1374 (23,7%), endarteritis, obliterating thromboangiitis – 12 (0,2%), varicose veins of the lower extremities – 18 (0,3%), (Fig. 1).

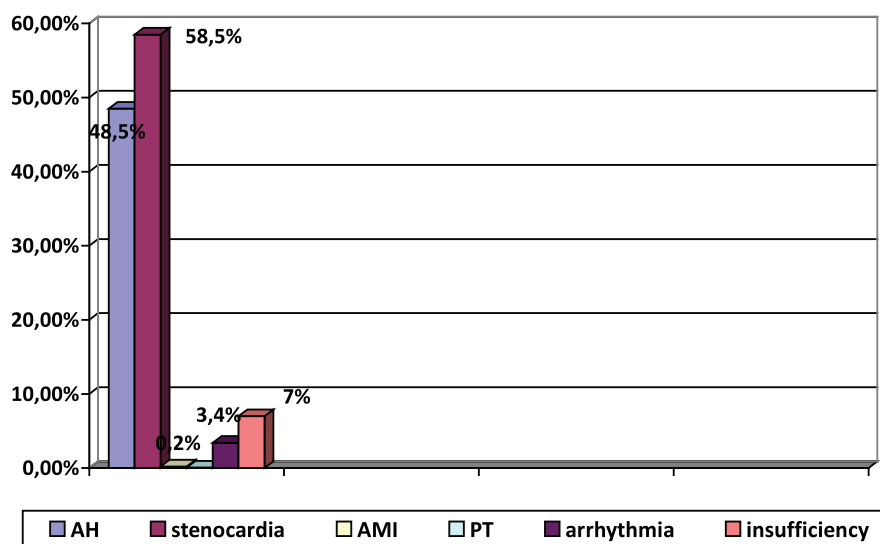


Fig. 1. The structure of coronary system diseases, 2012 year

For 8 months of 2013 according to routine inspections there were identified 565 patients with DCS.

Internal audit analyzed clinical examinations, rehabilitation and administration of free prescriptions for

patients with DCS. There were also selectively checked medical records: 48 outpatient cards of dispensary patients with DCS. The structure of patient morbidity was analyzed: essential hypertension prevails (in 31 people –

64,6%) as the primary diagnosis, as concomitant arterial hypertension – in 10 (20,8%). IHD. Exertional angina was marked in 8 patients (16,7%), atherosclerotic heart disease – in 6 patients (12,5%). Diabetes as an associated diagnosis was observed in 10,4% (5 patients). Out of comorbidities the effects of acute cerebrovascular conduction (CVC) occurred in 2 people (4,2%). One patient (2%) had a myocardial infarction complicated by chronic heart failure. On this occasion, there was performed a coronary artery bypass grafting. Rhythm disorders by atrial fibrillation type were also revealed 1 in patient. One patient (2%) had chronic rheumatic heart disease. It should be noted that in 8 patients (16,7%) there was revealed over diagnosis of DCS (Fig. 2). 6 people, representing 12,5% were not taken at the dispensary (“D”)

registration. The remaining patients were taken under observation, but there were not “D” – examinations in 10 patients (20,8%) in ambulatory cards. Incomplete examination was noted in 3 people – 6,25%. When conducting an ambulatory card there were defects, such as a mismatch in the diagnosis of the patient complaints in “D” – inspections (8,3% – in 4 patients), incorrect history data (4,2% – in 2), incorrect objective data (8,3% – y 4).The diagnosis not appropriate to International classification of diseases 10 (ICD – 10) and protocols of diagnosis and treatment – in 6 patients (12,5%). Incorrect treatment was administered to 1 patient (2,08%). Rehabilitation was not performed in 12 patients with DCS (25%). Not made preferential prescribing drugs in 10 patients (20,8%).

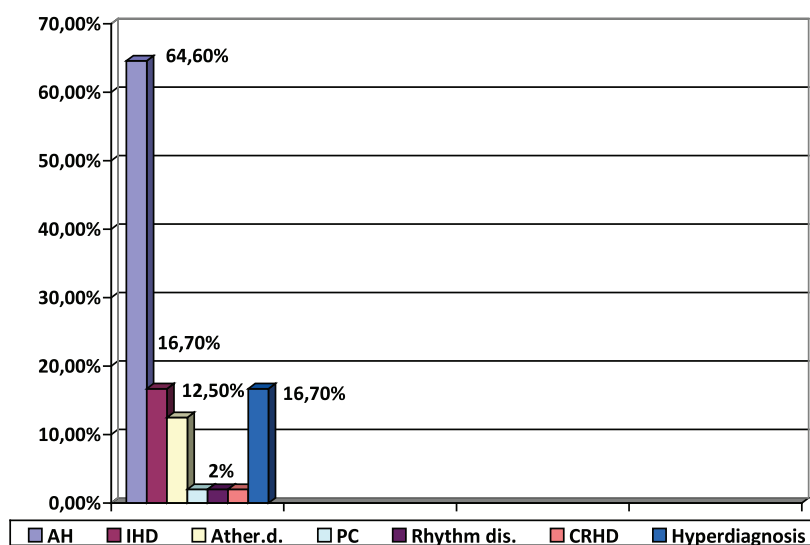


Fig. 2. The structure of coronary system diseases, 8 month of 2013 year

According to the results – registry accounts for the period from 01.01. 2013 to 14.08.2013, at SCE on PVC “Polyclinic of WWII veterans” in total there were noted 3604 active calls.

We selectively viewed 106 ambulatory cards of patients who made active calls to “ambulance”.

Out of them, 62 calls were made to chronic patients on the “D” registry and to patients with acute conditions. The most predominating calls were made by patients with chronic hypertension – 28 calls (45,2%), ischemic heart disease (6–9,7%) and dyscirculatory encephalopathy (5–8%). Drug hypotension, developed on the background of antihypertensive drugs overdose, was the occasion to call in 2 patients (3,2%) for ambulance (EMA) (Fig. 3).

In the future, in order to analyze the work of local service availability and service continuity between ambulance and the primary link there was carried on an internal audit analysis of active calls service.

Updated medical records were checked: a book recording of the active home visits and outpatient cards of served patients at home by district doctors. There were selectively tested 33 outpatient records of patients served by district physicians.

Call registration book is filled in a timely manner and it’s conducted in the prescribed form. Almost all calls were served and district doctors made records of

active visits. However, the most common shortcoming in the work of local doctors is the presence of defects in completing patient cards – identified in 20 of outpatient cards (60,6%). Further, it should be noted the incorrect treatment – in 8 patients (24,2%), lack of inspection – in 7 (21,2%), and incompatibility of the clinical diagnosis of ICD – 10. Incorrect diagnosis was made to 3 patients – 9%. Short recording description of the active visits was also in 3 patients (9%). In describing the complaint did not correspond to epicrisis of diagnosis in 2 patients (6%), patient history – in 1 (3%), the objective data of the patient – in 1 (3%), treatment of the patient – in 1 (3%). Anamnesis was made with errors – in 1 patient (3%), objective data were described with inaccuracies – 3% (1 patient). Objective data of 1 patient did not correspond to diagnosis made by physician.

Results of research and their discussion

According to the analyzed data the majority of the surveyed patients had “unmotivated” weakness, malaise, decreased capacity for work, feeling of heaviness and bursting in the head, at least – headache. Later the symptoms of progressive atherosclerosis joined and became leading: sleep, memory, vision distur-

bances, dizziness, buzzing in the ears, head, heart pain, dyspnea, irregular heart rhythm, emotional lability. Elderly people with prolonged duration of DCS had marked memory impairment on recent events, difficulties in assimilating new information, weakening of attention, the appearance of inappropriate emotional reactions. It should be noted a decrease (compared to younger patients) of frequency of hypertensive crises (HC), espe-

cially of type I (sympatho – adrenal). However, at decreasing the frequency of crises it proceeded considerably heavier in elderly patients than in the young people. Exacerbation of HC course in geriatric patients led to more frequent occurrence of complications – rhythm disorders, exertion angina, acute myocardial infarction, acute cardiac-left ventricular failure, (ACLVF) dynamic disorder of cerebral circulation or stroke.

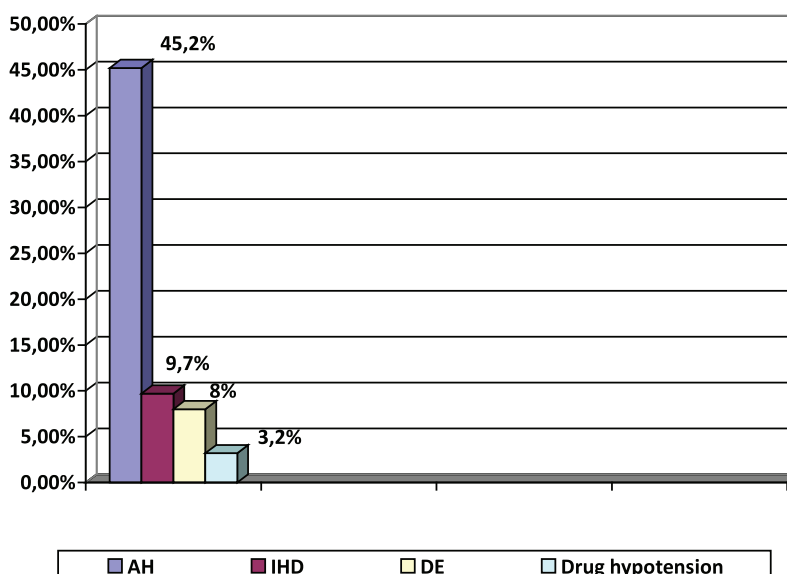


Fig. 3. The structure of the active calls, 2013 year

Thus, the examined patients have the following clinical features of DCS:

1. The disease most often occurs in later life of people (6–7–8 decade). Less common is a continuation of the disease, which started in an earlier period of life, but acquires the characteristics of late disease.

2. It is clinically characterized by less severe painful sensations, which hampers difficulty making early diagnosis.

3. Due to age-related changes in blood vessels and hemodynamics there occurs a relatively high level of systolic blood pressure (SBP) and low – diastolic blood pressure (DBP), which leads to an increase in pulse pressure (PP).

4. The symptoms of functional insufficiency of the major organs and systems in relation to age-related changes and progressive atherosclerosis are to be joined quickly.

5. Significantly more likely than in younger ones, there develop severe complications such as acute myocardial infarction, stroke, ACLVF, kidney failure, even from minor additional adverse effects.

6. There are relatively rare observed hypertonic crises – sympathoadrenal (I) type. Crises often occur on water-salt type (II) and are ac-

companied by left ventricular failure and circulatory disorder [3, 4].

Conclusions

DCS in elderly people proceed with minimal clinical manifestations, but with more frequent rapid development of complications. Oligosymptomatic latent course for DCS impairs early and timely diagnosis of the disease in patients of elderly and senile age, which reduce the chance of successful treatment of DCS in this age category [4].

In order to successfully diagnose of DCS it's necessary to introduce actively various diagnostic screening programs in assisting gerontological population.

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