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CLINICAL AND EPIDEMIOLOGICAL PROFILE OF PATIENTS WITH ATRIAL FIBRILLATION ASSISTED IN A PRIVATE CLINIC ON THE NORTH COAST OF RIO GRANDE DO SUL

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Abstract: Introduction: Worldwide, the most common arrhythmia in adults is atrial fibrillation. It is estimated that the prevalence of this disease is 2% to 4% of the population. This number may increase due to the prolongation of life expectancy, as advanced age is a factor that causes arrhythmia. Other comorbidities are also considered risk factors for atrial fibrillation, such as systemic arterial hypertension, diabetes, heart failure, coronary artery disease, chronic kidney disease, obesity and obstructive sleep apnea. Atrial fibrillation (AF) is a supraventricular tachyarrhythmia in which atrial electrical activation is abnormal, causing the atrium to lose its ability to contract. It can be symptomatic or asymptomatic and is divided into five modes based on performance, duration and spontaneous outcome. Objectives: The objective of this study was to track the clinical and epidemiological characteristics of patients with atrial fibrillation under medical supervision in the private network of the city of Osório. Methodology: The research design is a retrospective, descriptive and analytical study obtained from medical records of patients diagnosed with atrial fibrillation who were followed up at a specialized medical clinic in the city of Osório/RS. Epidemiological and clinical aspects were characterized through the interpretation of the results obtained. Results and Discussions: It was identified that the mean age of patients with AF was 74.1 years, women of Caucasian ethnicity. Most use the Unified Health System. Most residents of Osório, with permanent AF as the most incident, followed by paroxysmal AF. The most associated comorbidities were SAH, dyslipidemia, diabetes and stroke. The most used treatment was DOACs, followed by conventional anticoagulation vitamin K antagonist. The demand for the first care was for check-up, palpitations, dyspnea and stroke, respectively. Finally, the greatest difficulties encountered were poor medication adherence and depression. Conclusion: In view of the above, it is possible to identify the importance of the nurse, as a member of the multidisciplinary team and health educator, since patients with atrial fibrillation are mostly elderly, who have some cognitive difficulty, which can lead to poor medication adherence and misunderstanding of the dimension of this pathology. Characterizing the patient with atrial fibrillation also allows the nurse to make a specific care plan and allows the development of tools that will assist in the care in a safe and effective way.

Keywords: Health Profile; Atrial fibrillation; Cardiac Arrhythmias; Patient Assistance Team; Private sector; Cardiovascular Nursing.

INTRODUCTION

The elaboration of this research project was due to the importance of characterizing patients with atrial fibrillation undergoing treatment. The objective of this study was to trace the clinical and epidemiological profile of patients with atrial fibrillation who undergo medical follow-up in the private network of the city of Osório.

Atrial fibrillation (AF) is a supraventricular tachyarrhythmia with disordered atrial electrical activation, causing the atria to lose their ability to contract. It can be symptomatic or asymptomatic and is distinguished into five patterns, based on presentation, duration and spontaneous termination (KIRCHHOF, et al., 2016). Worldwide, the most common arrhythmia in adults is atrial fibrillation, it is estimated that the prevalence is 2 to 4% of the population, and this number may grow, due to the increase in life expectancy, since advanced age is a risk factor. for the development of AF. Other comorbidities are also considered risk factors for AF, such as systemic arterial hypertension, diabetes mellitus, heart failure, coronary artery disease, chronic kidney

disease, obesity and obstructive sleep apnea (BENJAMIN, et al., 2019).

According to the Brazilian Society of Cardiac Arrhythmias (SOBRAC), Brazil may have an increase of 5 to 10% of patients with AF, considering that the country has a large number of elderly people. The main concern is that AF increases the risk of thromboembolic events such as stroke, thus contributing to high rates of disability and mortality (SOBRAC, 2020).

The treatment is based on the use of anticoagulants, antiarrhythmics and catheter ablation, according to medical evaluation. For this, it is essential that patients undergo regular follow-up, preferably with a multidisciplinary team that includes a cardiologist, nurse, nutritionist, among others. Therefore, they are also responsible for their self-care, since the decision-making process must take into account the values, preferences and goals of the patient, favoring adherence and improving the quality of life (LANE, et al., 2015).

Primary care plays an important role in the identification and monitoring of patients with AF, mainly because it represents the gateway to the health system and, consequently, provides guidance on how to proceed in the face of the problem presented. One of the purposes of primary care is longitudinality, which values long-term care and comprehensiveness, meeting the demands of each individual to the extent necessary (ZIELINSKI, 2016).

The private health sector has become a strong ally in medical and hospital care, with a focus on the search for greater efficiency and delivery to the consumer, which is why they invest in professional training and precision equipment, so that work processes become safer and thereby increasing user demand for these services (BARBOSA, MALIK, 2015).

Nursing professionals play a fundamental role in the care of patients with atrial fibrillation, as care involves clinical monitoring and specific recommendations for each lifestyle. The important feature of nursing care is educational support for patients with atrial fibrillation, there are several topics that can be addressed as an object of this education. The nursing professional, within the multidisciplinary aspect, increases the success in the management of these patients, providing a favorable outcome, improving the quality of life of these individuals (FREITAS, et al., 2016).

Characterizing the patient with atrial fibrillation provided a better approach to the disease, choosing the appropriate treatment, reducing injuries and promoting health education. Thus, the guiding question of the research was "Does the identification of the epidemiological profile of the patient with atrial fibrillation facilitate the therapeutic approach?".

We characterized the individual with atrial fibrillation, seeking all the necessary information, which made it possible to create a database so that in the future I can develop a tool that assists in decision-making in nursing care for these patients.

EPIDEMIOLOGICAL DATA OF CARDIAC PATIENTS IN BRAZIL

According to the World Health Organization (WHO), cardiovascular diseases are a group of morbidities that involve the heart and blood vessels. Cardiovascular diseases are: coronary artery disease, cerebrovascular disease, congenital heart disease, deep and peripheral venous thrombosis, rheumatic heart disease and peripheral arterial disease (PAHO, 2017).

Cardiovascular diseases are in the fourth position in the reason for hospitalization and in the first place in the cause of mortality in Brazil. It is estimated that 27% of deaths globally and 31% in Brazil were attributed to cardiovascular diseases in 2015, of which

14% were due to Stroke (FIGUEIREDO, et al., 2020).

The risk factors associated with the development of cardiovascular diseases are known worldwide as systemic arterial hypertension (SAH), smoking, diabetes mellitus (DM), dyslipidemia, sedentary lifestyle, obesity/overweight, in addition to genetic predisposition. These factors favor the number of hospitalizations, disabilities and death (TESTON, et al, 2016).

The socioeconomic situation is related to a greater number of cardiovascular events, considering that the low-income individual may have more difficulty accessing the health service and also healthy eating, such as fruits and vegetables, which are relatively more expensive foods, therefore. inaccessible to the reality of many. Associated with this is the low level of education, linked to the individual's ability to obtain effective care in several ways, including low awareness of the importance of seeking specific care, as well as reduced access to information (ROSENGREN, et al 2019).

Treatment and cardiovascular events represent a major global economic burden on healthcare systems, due to increasing rates of hospital admissions and readmissions. Therefore, it is essential to promote primary and secondary prevention for better effective primary and secondary prevention to improve the prognosis of patients with cardiovascular diseases (STECA, et al 2017).

PRIVATE HEALTH CARE

According to the Brazilian Institute of Geography and Statistics (IBGE), the private sector comprises health plans, health insurance, hospital, outpatient and private diagnostic services. The private health sector also comprises the provision of services by self-employed professionals such as nurses, nutritionists, physiotherapists, in addition to non-traditional activities (alternative therapies) (IBGE, 2017).

The health system in Brazil is divided into a Public System and a Private or Supplementary System. Supplementary because it sells health plans and services offered by the Unified Health System (SUS), offering additional elements such as choice of provider, hotels, more agile access than statutory. (ABELHA, et al, 2014).

The SUS has universal coverage from the public system and free action by the private sector, health plans offer health care, so that the citizen does not lose the right to be served by the SUS, if he needs it (IESS, 2018).

The private health sector has grown more and more, due to economic dynamism, better resolution and shorter waiting times. The increase in life expectancy triggered a greater demand for health services, consequently causing a difficulty in accessing the Unified Health System (SUS), contributing to the search for private assistance. The concept of quality in the health sector, a relevant factor in the choice of care, has been changing over the years, taking into account the needs, interests and demands of all those involved: funders, health plan operators, health providers and users (NETTO, et al, 2019).

UNIFIED HEALTH SYSTEM AND CARE FOR CARDIAC PATIENTS

The Unified Health System (SUS) works as an integrated network so that service to users does not suffer interruptions, allowing individuals to have proper monitoring at different levels of care, according to their needs (COSTA, et al, 2013).

Considered the main gateway to the health system, primary care is the first level of care, individual and collective actions aimed at health promotion, protection, rehabilitation and disease prevention.

The assistance provided provides the population with access to different levels,

through strategies that articulate the necessary actions and services, promoting initial and continued care (ALMEIDA, 2011).

The Basic Health Unit (UBS), characterized as primary care, is responsible for prevention programs for various diseases, especially cardiovascular diseases, since it uses research methods, detection of risk factors, in order to reduce the progression of these diseases and their consequences. complications in a less harmful and effective way (ARAÚJO, LEITE, 2020).

The integration of the service network involves several factors, such as: ensuring access to various levels of care through strategies that associate the necessary actions and services that solve the demands, integration, coordination and continuity as interrelated and interdependent processes (HARTZ, MEDINA, 2009).

Reference and counter-reference is the organization of health services in networks supported by criteria, flows and working agreements, to ensure comprehensive care for individuals. The network provides for different levels of complexity, enabling resolute referrals between health facilities. It is considered a management tool aimed at the organization of health services, in order to facilitate access for patients, including cardiac patients (CUNHA, et al, 2016).

The cardiac patient, especially those who need to undergo coronary artery bypass graft surgery, catheter ablation, among others, need the articulation of all levels of the health care network, primary, secondary, tertiary and support services, having in view of the importance of comprehensive and continuous care (SILVA, 2011).

As part of the SUS, the care provided by the health team is considered essential for cardiac patients. From the perspective of complexity, care is understood as a process of interactions and associations between beings, enabling connections based on subjective forces between the person being cared for and the caregiver. Primary care enables the patient to have a cardiac rehabilitation program after hospital discharge, which, in addition to contributing to the maintenance of the patient's physical conditioning, favors their social interaction, reducing the rates of depression and anxiety after myocardial revascularization surgery (BLUMENTHAL, 2011).

Another very relevant program for cardiac patients that is guaranteed by the SUS is the Programa Farmácia Popular do Brasil (PFPB), which brings many benefits to individuals with chronic diseases and who need continuous use of medication, which most of the time they cannot afford. The purpose of the program is to expand the population's access to medicines considered essential, ensuring universal access (NASCIMENTO, et al, 2020).

ATRIAL FIBRILLATION

Atrial Fibrillation (AF) is a supraventricular arrhythmia, where the electrical activity of the atria is compromised, resulting in the loss of their ability to contract (SILVA, DIAS, 2019). Normally, each heartbeat starts at the heart's normal, natural pacemaker, the sinoatrial (SA) node in the right atrium. A normal heartbeat depends on an electrical wave that starts at the SA node and travels out of this node to first cover both atria, then cross the atrioventricular (AV) node, which is a bridge to the ventricles and finally to the ventricles., the main pumping chambers of the heart (MAGALHÃES, et al, 2016).

The cardiac stimulus of AF does not originate in the sinoatrial node, but in numerous atrial ectopic foci, causing the atria to reach a frequency of 450 to 700 bpm (SIMON, 2020).

The clinical classification of AF refers to the presentation, "paroxysmal atrial fibrillation"

is defined as that which is spontaneously reversed or with medical intervention within 7 days of its onset. Episodes lasting more than 7 days are called "persistent atrial fibrillation". "Long-standing persistent atrial fibrillation" to designate cases lasting longer than 1 year. Finally, the term "permanent atrial fibrillation" is used in cases where attempts to revert to sinus rhythm will no longer be instituted. According to etiology, it can be classified as "Nonvalvular atrial fibrillation", defined by AF in the absence of rheumatic mitral stenosis, mechanical or biological valve (ODOZYNSKI, et al, 2018).

It is the most frequent arrhythmia in clinical practice, which has an increased prevalence with advancing age and has high rates of morbidity and mortality in the population. It is estimated that 1.5 to 2% of the general population over 75 years of age is affected by AF, with 2.7 to 6.1 million adults prevailing in the United States, with this number expected to double by 2050. In Brazil, it is estimated a total of 1.5 million people have AF (JANEIRO, et al, 2014).

In addition to population aging, the risk factors that increase the prevalence of AF are: systemic arterial hypertension (SAH), diabetes mellitus (DM), acute myocardial infarction (AMI), postoperative cardiac surgery, valve disease, heart failure (HF), obstructive sleep apnea, obesity and genetic factors (ZONI, et al, 2013).

AF is clearly associated with the risk of ischemic or hemorrhagic stroke and mortality, cognitive alterations, HF and socioeconomic implications, as these patients generate high costs for public health (MOUNTANTONAKIS, et al, 2012).

Stroke of cardioembolic origin is characterized by blood stasis associated with AF. Because the atria do not have the ability to contract, blood can easily form clots within them, due to the slowing of the atrial flow, which can be displaced to the brain, causing a cardioembolic event, leading to the possibility of functional disabilities and death. et al, 2018).

The diagnosis of AF requires confirmation by electrocardiogram recording, the characteristics of which will include disorganized atrial electrical activity, an atrial rate between 450 and 700 cycles per minute, and a variable ventricular response. The baseline may be isoelectric, with fine or coarse irregularities or a mix of these changes (waves "f"). RR intervals, in general, are irregular and the presence of regular intervals indicates association of atrioventricular block with AF (PASTORE, et al, 2016).

The clinical picture associated with AF varies among individuals, ranging from no symptoms to fatigue, palpitations, dyspnea, hypotension, syncope, or cardiac arrest. The therapeutic approach addresses three factors: prevention and treatment of thromboembolic disease, heart rate control and prevention of recurrences (MAGALHÃES, 2016).

The treatments are based on anticoagulants, antiarrhythmics, catheter ablation, in addition to the treatment of all associated pathologies, in order to avoid decompensations. Anticoagulants are intended to prevent cerebral embolism, protecting the individual from stroke (SCANAVACCA, 2018).

According to medical evaluation, which has bleeding history as criteria, the most used anticoagulants are vitamin K antagonists, popularly known as Warfarin. Warfarin is highly effective in inhibiting vitamin K-dependent clotting proteins. Despite being safe and effective for primary and secondary prevention of thromboembolic events in AF, the level of anticoagulation must be controlled, and for this, the duration of prothrombin associated with INR, which must be kept between 2 and 3 (LEAL, et al, 2020).

However, despite being efficient, the use

of warfarin has a number of drawbacks such as multiple food and drug interactions associated with its use, in addition to the need for constant monitoring of its action, through the determination of the INR and the corresponding dose adjustment, something that is not always feasible (SERRA, et al 2016).

Due to the inconveniences brought by warfarin and the possibility of an anticoagulant monotherapy, the Direct Oral Anticoagulants (DOACs) were introduced on the market, which include the direct inhibitor of thrombin, dabigatran etexilate and direct inhibitors of factor Xa, such as rivaroxaban, apixaban and edoxaban. The advantages of direct factor Xa inhibitors over vitamin K antagonists such as warfarin include a rapid onset of action, no significant food interactions, low potential for drug interactions, and a predictable anticoagulant effect that obviates the need for routine clotting monitoring (ERIKSSON et al., 2011). The disadvantages are: the high cost, preventing access to the less favored and the contraindication in the case of patients with mechanical prosthesis and moderate to severe mitral stenosis (VALVULOPATHIES, 2017).

Knowing the importance of anticoagulation in patients with AF, a thromboembolic risk score was created in order to define the indication of the drug, initially called CHADS2. This score works with a score, for example, if the patient scores 2 or more points, full clotting would be indicated, due to the high risk of thromboembolic events. When the risk is intermediate (score 1), an antiplatelet agent is used or the risks x benefits of its use are evaluated. Values and meaning are as follows: C= Heart Failure and equals 1 point; H= Hypertension and is equivalent to 1 point; A= Age (=/>75 years) and is equivalent to 1 point; D= Diabetes Mellitus and is equivalent to 1 point; S2= previous TIA or stroke and is equivalent to 2 points (LAGUADO-NIETO et al., 2019).

Due to the large number of patients who fell into the intermediate risk category, this score was updated, where it was called CHADS2VASc, where V= Vascular disease (previous AMI, Peripheral arterial disease or aortic plaque) that adds up to 1 point, A= Age (65 to 74 years), which adds 1 point and S= Gender, if female, which also adds 1 point. According to this score, adding 2 points (High Risk), full anticoagulation is recommended, adding 1 point (Intermediate risk), full anticoagulation or antiplatelet aggregation and not adding any point (Low risk), antiaggregation is evaluated or nothing (VAN DEN HAM et al. 2015).

Antiarrhythmics are used to control heart rate, prevent recurrences of AF and are also used in chemical cardioversion (GABRIEL, 2018). Catheter ablation is a well-established therapy for patients with AF, particularly in symptomatic cases in which antiarrhythmic drug control has failed or been intolerant. Its main technique consists of electrical isolation of the pulmonary veins (PV), through applications of radiofrequency or cryoenergy in the atrial portion of the PV ostia (SILVA, et al, 2020).

NURSING CARE FOR THE PATIENT WITH ATRIAL FIBRILLATION

Patients with AF require constant care, given that this heart disease may have no apparent cause and may complicate matters. With the evolution of healthcare technology, the likelihood of interventions and treatment of AF increases. In this context, nursing professionals have a fundamental role in patient care, which requires specific care and recommendations focused on the clinical condition and each lifestyle (ZIMERMAN, 2009).

The nurse must be aware of emotional disturbances and encourage the support of

the family, which must always be involved in the treatment. Nurses must have extensive knowledge about AF and performance must focus on reducing patient anxiety, warning signs of bleeding and arrhythmia control. In care, it is important for the nurse to interact with the patient, taking into account their needs (BORGES, 2017).

The nursing diagnosis must be based on the patient's history which will possibly include: risk of infection related to insertion, invasive catheter procedures; risk of ineffective coping and lack of self-care knowledge. In the nursing intervention, monitoring of the arrhythmia must be carried out; time electrocardiogram; measurement and control of vital signs, observation of the level of consciousness; records of assessments and care provided; and patient orientation (LIMA, et al, 2016).

Health education is of great importance, especially for the prevention of complications from AF. Nurses must advise on the importance of the correct use of medications, the side effects of the treatment and that their routines of lives may be changed, with restrictions in daily life not previously experienced. The side effects that the drugs can cause: hypotension, dizziness, bradycardia, nausea with vomiting, insomnia, tachycardia, syncope, allergic reactions, chest pain and cough. As well as loss of appetite, diarrhea, colds, drug or food interactions (SANTOS, 2019).

Nurses need to be able to know the symptoms caused by drug treatment. When the patient undergoes ablation to reverse the arrhythmia, continuous monitoring and prevention of complications related to the procedure are necessary. Cardiopulmonary resuscitation materials must also always be available and close to the patient. The nursing professional must guide the patient regarding the interruption of the medication and its consequences, as well as any need to associate other medications (FREITAS, et al, 2016).

It must be borne in mind that nursing care and teaching self-care to patients with AF lead to major changes. Daily activities undergo changes that can cause the patient's emotional exhaustion, and their quality of life may be compromised, especially when using oral anticoagulants, which have many side effects and require continuous control. Patients living with AF are often uncomfortable with side effects or fear of sudden illness. It is up to the nurse to provide comprehensive and humanized care, with availability to listen, teach, clarify doubts, transmit competence, credibility and attention, encouraging the maintenance of affective family and social bonds (TELLES, CASSIANI, 2004).

In this context, the nurse can work together with the multidisciplinary health team in the treatment, and in the promotion and prevention of the patient's health, acting mainly on reversible risk factors and with guidance, contributing to the improvement of the quality of life of these people (HINDRICKS, et al, 2020).

RESULTS AND DISCUSSIONS

Of a total of 50 patients included in the study, the mean age was 74.1 years, with a predominance of females (54.0%). All of them were of Caucasian ethnicity and a large part (76.0%) received care in the SUS. The average number of consultations performed was 6.2.

According to SILVA et al, 2017, atrial fibrillation affects 2% of the general population and reaches 15% in individuals over 80 years of age, with half of patients with AF being 75 years of age or older.

Changes in the structure of the atrial myocardium, particularly fibrosis, separate the muscle fibers, interfering with the continuity of electrical impulse conduction, resulting in reduced conduction velocity, which is critical for reentry. Fibrosis leads to the progression of AF. Electrophysiological factors, including

electrical remodeling, and morphological factors, such as fibrosis and atrial dilatation (structural remodeling), are considered the main factors involved in the pathophysiology of AF. Aging contributes to these changes in the vascular wall, allowing the stiffening and hypertrophy of the cardiac chambers in the myocardium, which may result in the development of AF (DORNELES et al, 2018).

In view of the above, we can say that from the age of 60 onwards, patients increase their vascular stiffness, and AF can be caused either by SAH, common in this age group, or by vascular stiffening, or by both situations. These risk factors become more prevalent and more severe with increasing age, due to longer exposure time, pathological processes are often not visible, but functional and anatomical changes act by modifying the cardiovascular structure, providing greater fragility to pathophysiological mechanisms.

Atrial fibrillation is also higher in females, as there is a greater chance of variation in the genes encoding subunits of potassium channels, one of which is located on the X chromosome, causing changes in the function of these channels in the atrial muscle and prolongation of the refractory period. electrical, generating irregular ventricular contraction (LEITE, 2020).

Women represent a greater number of patients with AF, due to greater survival and also the predisposition to develop cardiovascular diseases. Long working hours, fast-paced routines expose women to high levels of stress that, associated with a sedentary lifestyle and poor diet, further increase the chances of developing heart problems. Estrogen has a beneficial function in women, it has a vasodilating action, preventing the accumulation of LDL and facilitating HDL in the arteries, but in menopause, estrogen has a progressive drop and with that the reduction of the protective effect on the woman's heart.

Therefore, the association of age and gender with atrial fibrillation is clear.

Almost a third of the patients (74.0%) came from the city of Osório, followed by the cities of Caraá (6.0%), Tramandaí (6.0%) and Maquiné (4.0%).

Due to the clinic being located in Osório, the largest number of AF patients in this city was evidenced, followed by neighboring cities and this was related to displacement and ease of access.

Regarding the types of atrial fibrillation, 64.5% were diagnosed as permanent, 34.0% as paroxysmal and only 2.0% as long-term persistent. Of these, almost all (94.0%) have Systemic Arterial Hypertension, Dyslipidemia (64.0%) and Diabetes Mellitus (36.0%).

Permanent AF is defined when attempts to revert to sinus rhythm will no longer be instituted, as they are ineffective. Rhythm is already established and sustained in atrial fibrillation, due to ion channel remodeling, which changes the electrophysiological substrate and thus promotes sustained reentry and increased trigger activities (EVERETT et al 20116).

Paroxysmal AF is characterized by isolated episodes of atrial fibrillation, reversed spontaneously or with medical intervention in less than 48 hours (NOLASCO, et al, 2021).

The prevalence of permanent AF may be related to inadequate treatment, lack of knowledge and low demand for the health system, whether private or public, as evidenced by the fact that most patients started investigation for a checkup and not necessarily for some symptom, which makes the patient think he has no health problem.

Regarding comorbidities, Systemic Arterial Hypertension (SAH) is associated with AF, more specifically due to aortic arterial stiffness. The systolic and diastolic movements observed in the great vessels, over the years, can promote an exhaustion of the

elastic fibers, leaving them unaligned and brittle. Elastic fibers are not replaced by other similar fibers, but by collagen fibers that are calciophilic. Such effects eventually result in stiffness of the great arterial vessels (ZHANG, Y. et al, 2014).

Dyslipidemia is strongly related to the risk of stroke, it is classified as a metabolic disease resulting from an increase in plasma triglycerides, low-density cholesterol and a reduction in high-density cholesterol levels. Changes in plasma lipids and their lipoproteins are linked to increased cardiovascular risk (BERTA, SANTOS, LUZ, 2013).

Diabetes Mellitus (DM) is a metabolic disease whose main characteristic is the increase in blood glucose (hyperglycemia), caused by a deficiency in the production of insulin by the body. High blood glucose affects cell signaling pathways by increasing the production of oxygen-reactive substances, promoting the occurrence of oxidative stress. Consequently, changes in gene expression, apoptosis of cardiac muscle cells and blood vessel dysfunction occur (RODRIGUES et al, 2017).

Left ventricular concentric remodeling as a relevant feature of diabetic myocardium is due to the deposition of triglycerides and increased extracellular volume. Remodeling occurs because the consequent increase in myocardial stiffness translates into diastolic dysfunction, reduced myocardial tension and atrial enlargement, which has been associated with a higher prevalence of atrial fibrillation in patients with diabetes (OLIVEIRA et al, 2021). There was a higher frequency of use of DOACS (72.0%), conventional anticoagulants (26.0%) and antiarrhythmics (6.0%). As for the observed outcome, all participants underwent complementary exams and pharmacological treatment.

Direct oral anticoagulants (DOACs) are drugs used in clinical practice to prevent thromboembolic events in patients with AF. These are direct factor Xa inhibitors, such as rivaroxaban, apixaban and edoxaban, and the factor IIa inhibitor, dabigatran. The choice for this medication is mainly determined by the lower chance of hemorrhage, since DOACs have a short half-life and in case of minor bleeding, the conduct is only the momentary suspension of the medication (ADCOCK, GOSSELIN, 2015).

DOACs have the advantage of factors such as oral administration route in fixed doses, good bioavailability, half-life ranging from 8 to 15 hours, without the need for monitoring. The renal route of excretion is 25% for apixaban, 33% for rivaroxaban, 50% for edoxaban, and 80% for dabigatran. These drugs have been licensed for the prophylaxis of venous thromboembolism in patients undergoing major orthopedic surgery and for stroke, the main risk for patients with AF (YOSHIDA, 2016).

Given the higher prevalence in the use of DOACs in this study, it is worth remembering that this is a private clinic, where most patients have the financial means to pay for this medication, given its high cost.

Conventional anticoagulants, vitamin K antagonists (VKA), are still widely used because they are low-cost drugs, made available by the SUS and without contraindications for patients with mechanical valve prostheses and non-valvular AF. Patients who are using VKA need periodic laboratory controls, and the dose must be readjusted according to the established value of the INR (BRAGA, MACHADO, MARTINS, 2021).

These anticoagulants, with Warfarin as one of the best known, are monitored by the prothrombin time expressed by the international normalized ratio (INR), with the objective of establishing the therapeutic range between 2 and 3, minimizing the risk of bleeding. One of the drawbacks of this

medication is that the anticoagulant effect can be reduced by factors such as weight gain, diarrhea and excessive consumption of foods that contain vitamin K, which are very common in patients' diets.

Antiarrhythmics are drugs of choice to establish heart rhythm control in intermittent AF, with the main purpose of reducing symptoms or a feeling of well-being when patients are treated, either by reducing heart rate or by restoring rhythm. sinus (MOREIRA, 1999).

Most antiarrhythmics are classified into 4 main classes based on dominant cellular electrophysiological effect. Class I drugs are sodium channel blockers, decreasing the conduction velocity in fast channel tissues. Class II are beta-blockers, which affect predominantly with slow channels, where they decrease the automatism index, conduction velocity and prolong refractoriness. Class III are primarily potassium channel blockers, which prolong the action potential duration and refractoriness of fast and slow tissues. Class IV are non-dihydropyridine calcium channel blockers, which depress calcium-dependent action potentials, decreasing the automatism index and consumption rate and prolonging refractoriness (FEREZ, 2017).

Regarding the initial complaints, the Check up predominated (48.0%), followed by palpitations (24.0%), dyspnea (8.0%) and after stroke (8.0%). In addition, most of these participants did not consult other specialties (70.0%).

Cardiovascular risk stratification, identified as Checkup in research, is a way of calculating overall cardiovascular risk and projecting an individual's risk over time, with a view to reducing mortality from cardiovascular disease. The stratification of cardiovascular risk is an important key to the prevention of cardiovascular events, not merely due to the presence of pathologies or chemical alterations in isolation, but by assigning values to the sum of risks resulting from multiple factors in each individual (MENDEZ, SANTOS, RIBEIRO et al, 2018).

Palpitations are a common complaint in clinical practice, but they are also a very nonspecific symptom: patients may notice small changes in heart beats (in their frequency or force of contraction), without this being correlated with major cardiac arrhythmias; on the other hand, cardiac arrhythmias are often asymptomatic. Palpitations are therefore an inaccurate indicator of rhythm disturbances. Some variables help to define the clinical significance of this symptom, and they are easily obtained during a careful anamnesis and clinical examination. In AF, as the rhythm is irregular, patients may refer to it as a "failure" or a more vigorous beat (CHEQUER, 2015).

Dyspnea can be a manifestation of many syndromes. It may be present in large pericardial effusions that occur due to abnormal accumulation of fluid between the membranes that surround the heart. Furthermore, dyspnea can be considered as an anginal equivalent in coronary artery disease (DE SOUZA JUNIOR, FRANZON, 2021).

Stroke is defined as a persistent focal neurological deficit, due to the occurrence of ischemia followed by infarction, a consequence of the proximal obstruction of an artery. This obstruction can be caused by a thrombus, embolus or tumor compression. As there is an interruption in the supply of glucose to the neurons of the affected area, the clinical picture is established quickly. Risk factors for stroke can be divided into modifiable and non-modifiable. The changes include arterial hypertension, atrial fibrillation, diabetes mellitus, smoking and dyslipidemias. While gender, age, heredity and geographic location are part of the non-modifiable (RODRIGUES, FERNANDES, GALVÃO, 2017).

Despite the greater number of patients

seeking care for a check-up, there is still a significant number of people who only seek care after having symptoms or major events, such as stroke.

The concern to identify this arrhythmia as early as possible is precisely to prevent the patient from having neurological damage and even death, hence the importance of the nurse as an educator, promoting actions that encourage the community to make routine consultations.

Finally, 68.0% of the patients did not report difficulties and only 10.0% and 8.0% of them indicated poor medication adherence and depression, respectively.

Poor medication adherence and depression may be related to lack of knowledge about the pathology and fear of death, since AF affects more elderly people, most of the time they have cognitive deficits and inadequate follow-up of drug therapy. The most common reasons are drug side effects, often not tolerated by the elderly, disappearance of symptoms, causing a false sense of cure, high cost of treatment, illiteracy and memory disorders (CINTRA, GUARIENTO, MIYASAKI, 2010).

With the pandemic, we saw an important growth in patients with anxiety disorder, fear of leaving home to make their routine appointments and even feeling symptoms in which they needed medical follow-up. Postponing the review of pre-existing conditions made it very difficult for the treatment to be successful. Patients who need dose adjustment of vitamin K antagonist anticoagulants, did not perform their exams for fear of Covid and ended up with ineffective doses, greatly increasing the chances of thromboembolic events.

FINAL CONSIDERATIONS

Atrial Fibrillation is the most frequent sustained arrhythmia in clinical practice, accounting for 33% of hospitalizations for arrhythmia. It occurs between 1% to 2% of the world population, with a tendency to increase, due to population aging. In addition to its epidemiological importance, AF stands out for its clinical consequences, which include thromboembolic events, hospitalizations and a higher mortality rate.

The research showed that older patients are more likely to develop atrial fibrillation, the mean age is 74 years with a predominance of females, this finding is compatible with changes in the vascular wall and hypertrophy of the heart chambers, factors that aging favors. Women leading the ranking of AF carriers is due to greater survival, variation in genes that encode potassium channels and the progressive drop in estrogen at menopause, which makes vasodilation difficult, thus favoring the accumulation of LDL in the arteries.

The research showed that most patients have systemic arterial hypertension, dyslipidemia and diabetes. Hypertension is justified by the rigidity of the great vessels, as systolic and diastolic movements can promote exhaustion over the years. Dyslipidemia is classified as a metabolic disease resulting from the increase in triglycerides, thus linking the risk of cardiovascular diseases. The higher prevalence of AF in diabetic patients is due to concentric ventricular remodeling, resulting from the deposition of triglycerides and increase in cell volume, this increase and consequently myocardial stiffness translates into diastolic dysfunction, reduced myocardial tension and atrial enlargement.

The majority sought care for a check-up, but the survey showed that most reported palpitations, dyspnea and the occurrence of stroke. Palpitations in patients with AF are very common, despite being an inaccurate indicator, some variables help to define the clinical meaning and are obtained through physical examination and anamnesis. CVA is

an unfavorable outcome of AF, as it can leave permanent sequelae and even lead to death.

The most used treatment was DOACs, followed by conventional anticoagulation and this finding may be related to the fact that the sample population was treated in a private clinic and had better financial conditions to pay for these drugs. DOACs have some factors such as oral administration in fixed doses, without the need for monitoring. Conventional anticoagulants are still widely used, due to their low cost, availability by the SUS and not having contraindications for patients with mechanical prostheses and non-valvular AF.

The difficulties mentioned were poor medication adherence, depression, fear of death. Due to the smaller number of patients using vitamin K antagonists, the complaint about PT control was proportionally lower. Such difficulties cited may be related to the lack of knowledge that may be associated with cognitive deficits, also generating inadequate follow-up to drug therapy, which is very common in the elderly.

Given the above, it is possible to identify how important it is for nurses to participate as health educators, whether in guiding treatment or in preventing diseases. We emphasize the importance of the professional nurse investing in knowledge about arrhythmia and cardiovascular diseases, since they are diseases of great global demand in health. Within this context, developing tools that help the care and safety of patients with atrial fibrillation can be a great advance in health prevention, maintenance and recovery.

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