



Full Length Research Article

FUNCTIONAL CAPACITY PHYSICS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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ABSTRACT

The present study evaluated the functional capacity physics in patients with diagnosis of rheumatoid arthritis in a hospital of specialties in Mexico through the scale Health Assessment Questionnaire (HAQ). Was applied to a sample of 17.4 per cent of the population which attended consultation in the period of study time, exclude patients with other pathology. The results reported that 59.4% with a level of class I, II and III of rheumatic arthritis according to the American College of rheumatica (ACR) that presents and the articular deterioration in the extremities are adapted to the basic activities of daily life, in contrast, at a level of class IV of rheumatic arthritis have the limitation for core activities. The 60.9%, considered a state of health healthy, despite the joint deformities, likewise the 35.9% presented strong pain, indicated that is one of the determining factors significant for the inability, limiting the arches of mobility in the patient to be able to perform activities such as: dressing, eating, open and close the keys of the water, walking on flat ground, etc. so that the approach of an adequate pain management is fundamental and include the symptoms for a timely treatment based on the comprehensive assessment of their disease.

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INTRODUCTION

Rheumatoid arthritis (RA) is a joint disease, autoimmune, multisystemic, inflammatory and chronic, whose body main target is the synovial membrane, is characterized by demonstrations in the joints such as pain, swelling, and stiffness; the presence of general symptoms such as fatigue, a feeling of malaise, fever light, lack of appetite and body weight loss. (Romero, 2010). With the step of the time is common it appearance of some manifestations extra-articular, i.e., that affect to sectors of the body not related with them joints as are the skin, vessels blood, heart, lungs, etc., in absence of treatment, the disease can cause important limitations physical and a marked deterioration in the activities of life daily (Ariza *et al.*, 2007). The Inegi mentions that in Mexico there is more than 1 million of people with AR and 3 of every 4 people that it presented are women, according to statistics show that of the 100% of them women, the 75% is in age productive (between 25 and 55 years), insofar as in men only is the 25%.

Padra (2015) mentions that in Cuba them patients with AR predominate the sex female, in a mean age of 56 years. By which the disability form part of the course natural of the disease, by this produces the limitation physical. The disability functional is a factor important, because the disease involves deformity, pain, loss of functions of the life daily, and affects in the displacement, the care personal, the work and other activities Basic (Vinaccia *et al.*, 2005). The inability created by the AR increases generally in the first years of the diagnosis, to later become slower at the end of the life of the patient; it is possible that after thirty years of persistence is accelerate again with all its symptoms, and can reduce the life of the people who suffer from between 3 and 13 years compared to those who did not suffer (Vinaccia *et al.*, 2005). Currently there are instruments to assess the capacity functional physical in patients with diagnostic rheumatic, these can be generic or specific, one of them is the scale of HAQ (health Assessment Questionnaire), or RAQoL (Arthritis Quality of Life Scale). (Schneeberger *et al.*, 2008). In where have been used successes for evaluate the level of disability functional in patients with AR and osseous arthritis, to such level that those results could take is as base for a treatment specific (Hogrefe *et al.*, 2009). According to the hospital of

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San Juan de Alicante, 95% the nursing activities are care and 5 per cent are educational, this implies that there is a greater impact on the first level for its timely treatment and that the majority of patients with AR attend when the disease is already chronic (Carbonell *et al.*, 2008).

The AR should be treated early, since the development of the disease is affected in 75% of patients at 2 years after its launch, if it provides a timely treatment before the 3 months, less than 10% submit deterioration (Prada *et al.*, 2013). This with the purpose so is provide an approach multiple where include: available personal, medication, exercise (physiotherapy), and rest, necessary for slow and limit the damage in the joints (Escalona and Fernández, 2006). Also the adaptation will depend on various factors such as age, gender, social status, education, religious beliefs and others, these factors may allow in some cases, progress in the activities of life would say (Yescas *et al.*, 2008). Therefore in the approach of the disease it is essential to understand and include those aspects that are affected by the pain, disability and other symptoms of the disease.

MATERIALS AND METHODS

A study was conducted quantitative, descriptive, prospective study in patients with rheumatoid arthritis in the Hospital of specialties in Mexico, with a sample size of 17.4 per cent of the population which attended consultation in the period of time of work, assessment instruments are applied in an age range of 16 to 78 years, that does not present any rheumatic disease or bone lesion, fibromyalgia or some other pathology, was previously requested informed consent of approval to participate in the research. The variables were: sex, age, occupation, time of the disease, type of therapy. For the assessment of the functional capacity physics used the HAQ, specifically the adapted and validated in Cuba (CU- HAQ) (Reyes *et al.*, 2013). Is divided into 8 areas dress and grooming, waking up, eating, walking, hygiene, scope, grip, activity. Is scored from 0 to 3 (0 without difficulty, 1 with difficulty, 2 with help, 3 cannot). The sum of the scores will be split between 17 item, according to the 8 areas. The score direct may oscillate between 0 (no inability) 1 (mild inability) 2 (moderate disability) and 3 (maximum handicap). For the perception of pain was used the Visual Analog Scale of pain (EVA), which quantifies the intensity of pain in a straight line of 10 cm, the score is direct from 0 (no pain) to 10 (severe pain). The perception of health, consists in a straight line of 10 cm, scale of measurement is 0 (very healthy) to 10 (not healthy).

RESULTS

The sample was constituted with a total of 17.4% of the population in patients with rheumatoid arthritis, of which 84.4% were female and 15.6% male. According to the test of hypotheses of this dígrafo chi-square with a comparison establishes that there is significant difference (alpha = 0.05) between the functional capacity physics of each one of the elements of the sample. We reject the hypothesis, where is located the 59.4% with no disability, so stable that there is no limit to the daily activities, 6.3 per cent have a moderate disability. Table 1 identifies the frequency of disability.

Table 1. Frequency table according to the HAQ, was carried out through an analysis of descriptive statistics do not parametric. (SPSS version 21), Source: (own, 2016)

HAQ		
	F	%
Not inability	38	59.4
Slight inability	22	34.4
Moderate inability	4	6.3

In the state of health of the 60.9% of patients feel healthy, despite that present deformities in the extremities can be limitations to their daily life activities, 12.5% considered that his state of health is not healthy (Table 2). There is a correlation of 0.99 between the functional capacity physics, which stable constraints of activities with a coefficient of 0.397.

Table 2. Frequency table according to the state of health, was carried out through an analysis of descriptive statistics do not parametric. (SPSS version 21), Source: (own, 2016)

Health condition		
	f	%
Very healthy	5	7.8
mild	12	18.8
Medianamente Saludable	23	35.9
moderate healthy	15	23.4
little healthy	7	10.9
not healthy	2	3.1

The scale of assessment of pain, 35.9% presented a level of severe pain, this is due to the process of evolution of the disease were associated in the intensity of the inflammation underlying (Table 3). When performing the coefficient Kendall is 0.398 with a significance level of 0.99, reflecting the degree interfere in how you feel in the state of health of the person, since it is a limitation to perform their activities of daily living basic.

Table 3. Frequency table according to the score obtained with the scale of EVA is carried out through an analysis of descriptive statistics do not parametric. (SPSS version 21), Source: (own, 2016)

EVA		
	f	%
Without pain	6	9.4
Very slight	3	4.7
Mild pain	5	7.8
Menas pain	12	18.8
Severe pain	23	35.9
Very strong	13	20.3
Intense pain	2	3.1

DISCUSSION

At the descriptive level in the study found 35.9%, presented a severe pain, that interfere in their state of health to perform its core activities. The pain if was associated positively with the functional disability physics, associated with the lack of control of mobility (stiffness), which is common in this type of patients. González and Moreno (2007), In its study in Mexico found that the AR is the main cause of chronic pain, that both men and women have similar intensity of pain and limitation in the activities of daily life. In the study that i Méndez *et al.* (2013), the pain measured by the scale of EVA showed that more than half 64.2%, perceive intense pain and 22% moderate. Despite the fact that the majority of these cases

showed a disability slight and moderate, reflected feel a box of intense pain. Prada *et al.* (2015), found that the pain affects in the style of life, with a correlation of 0.83, reflecting a limiting factor in its adaptation into their daily activities. Sanchez *et al.* (2015), in their study included the variables to greater extraversion less pain and, on the other hand, to greater thought more pain, explaining the 31.5% of the variance of pain, of which this affects your lifestyle each patient. Round *et al.* (2008), mentions that the pain is crucial for the patient and the specialist in the area of health, thus being one of the main objectives for its control. To exercise a significant influence in the process of adaptation and response assumed by the patient (Gaviria, 2006).

According to Serra (2000) the pain generates psychological impact decreases the functional capacity and style of life, also sensitized and affects the relatives. Can cause depression and anxiety in patients and as a result may refer more pain and fear toward the mobilization, where complicates the situation of the patient (Boy, *et al.*, 2012). Therefore, the depression was mainly associated with perception, functional disability, deterioration in the health and anxiety (Vinaccia, *et al.*, 2005). Villamizar *et al.* (2015) consider that patients with AR should be educated to start an early treatment, and as other diseases could affect the perception of pain. In a study of Colombian patients with rheumatoid arthritis mentioned that there are variables that can influence the coping of their disease, can be positive as negative, thus influences their state of health and in the management of pain, as is the social, cultural and economic situation, which seems to be associated mainly with the adaptation to the disease in these patients (Vinaccia *et al.*, 2004). In this study it was found that 12.5% perceives a state of health does not healthy, therefore, may vary according to as confront their disease. Therefore, has a significant socio-economic impact, since there is an incapacity for work, as characteristics of the disease (Hogrefe *et al.*, 2009). Quiceno andamp; Vinaccia (2011), makes reference to one of the consequences for the adaptation of the disease and the quality of physical life, can be the identity, the personal control and response. On the other hand, have confidence in their capabilities, are persevering, adapt to the changes by accepting both of themselves as of life (Quiceno andamp; Vinaccia, 2013). In this study concerning the functionality physical the 40.7% is in a degree of mild and moderate, which relates to the study of Franco *et al.* (2015), with 112 individuals in the city of Medellín. In particular, you can confirm that the level of the functional capacity Physics focuses not on the deformities that is presenting in the disease, for which the main limitation of daily activities is the pain.

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