

Behavior of coxarthrosis at the Camilo Cienfuegos Provincial General Hospital of Sancti Spiritus, 2022

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Abstract

Introduction: Hip osteoarthritis became a primary problem over time, in relation to the greater current longevity of people. Objective: Determine the behavior of coxarthrosis at the Camilo Cienfuegos Provincial General Hospital of Sancti Spiritus in the year 2022. Methods: A cross-sectional descriptive study was carried out by the University of Medical Sciences at the Camilo Cienfuegos Provincial General Hospital of the province of Sancti Spiritus, Cuba. The sample consisted of 28 patients who underwent surgery with a diagnosis of coxarthrosis in the Orthopedics and Traumatology service.

Results: The most representative age group was 50 to 59 years old, 57.14% belonged to the female sex. All patients reported suffering from limitation of external rotation and abduction movement, 92.85% reported suffering from deterioration in muscle strength. Grade 4 osteoarthritis prevailed in the patients, of which 92.85% of those operated on had a satisfactory evolution.

Conclusions: Patients with a diagnosis of coxarthrosis operated on at the Camilo Cienfuegos Provincial General Hospital of Sancti Spiritus in 2022 were described, which made it possible to determine that this procedure had good results and with a low percentage of complications.

Kew Words: vocational guidance; imaging; medical radiophysics

Introduction

Hip osteoarthritis became a primary problem over time, in relation to the greater current longevity of people. Structural alterations of the joint, that is, dysplasia and femoro-acetabular conflict, occur in different degrees. In the last ten years there have been notable advances both in the understanding of the etiopathogenesis of this type of osteoarthritis and in therapeutic attempts to stop its evolution and natural history. [1] Hip osteoarthritis is a common location of osteoarthritis and the most disabling form. Symptomatic osteoarthritis of the hip affects 3.5 and 5.6% of those over 50 years of age, and can reach 10% in people over 80 years of age. In Spain, the prevalence of symptomatic osteoarthritis is estimated at 4.4%. The distribution by sex varies depending on the age group, with a slight predominance in males

before the age of 50 and with an increase in females after menopause. [2] polyarticular involvement is more common and more severe forms require prosthetic joint replacement. Hip osteoarthritis is unilateral in 55-65% of cases. [2] Osteoarthritis is the most common cause of coxofemoral pain in adults, especially in older subjects, increasing its incidence with aging. It has a prevalence that ranges between 1.1% in men and 3.6% in women, very significantly affecting their daily activities and quality of life.[3]

Primary or idiopathic hip osteoarthritis is part of the primary polyarthrosis condition, such that a quarter of cases present osteoarthritis manifestations in one or two other joints [2] They represent 50% of all osteoarthritis and,

regarding their causes, aging, factors due to overexertion, deficiency factors, etc. should be considered. Secondary coxarthrosis would represent the other 50%, although some authors suggest that up to 80% of cases are secondary to other patologías. [2]

The situations that are most frequently related to this pathology are developmental dysplasia of the hip, septic arthritis, and detachment. epiphyseal . The lower limb scanogram serves to document the presence of any deformity of the femur and tibia in the coronal plane in addition to hip pathology and estimation of limb length inequality. [4] In its pathogenesis, a series of risk factors are described that are usually capable of triggering the disease, or aggravating its course; Among them, it is important to point out disorders of joint alignment and mobility, overweight and obesity, infectious processes and chronic diseases that include a sustained inflammatory process within their mechanisms of action. [5] In the beginning, hip osteoarthritis may cause pain to appear slowly, located in the anterior aspect of the thigh and in the groin, causing impotence in walking and claudication. [6] At the Provincial General Hospital of the province of Sancti Spiritus, the prevalence of this degenerative disease is unknown, which mainly affects older age groups. Due to its degree of involvement in the hip, it limits their ambulation and they must undergo surgery. Therefore, this work aims to determine the behavior of coxarthrosis at the C a milo Cienfuegos Provincial General Hospital in Sancti Spiritus in the year 2022.

Method

was carried out by the University of Medical Sciences at the C a milo Cienfuegos Provincial General Hospital in the province of Sancti Spiritus, Cuba, in the time period from January to December 2022. The sample was

made up of 28 patients who underwent surgery with the diagnosis of coxarthrosis or osteoarthritis of the hips in the Orthopedics and Traumatology service in the center study of the year 2022 with the following criteria:

Inclusion criteria:

1. Patients undergoing surgery with a diagnosis of hip osteoarthritis with their informed consent.

Exclusion criteria:

2. Patients who did not offer their consent to be included in the study. The following qualitative variables were studied to achieve the proposed objective: age group (under 50, 50-59, 60-69 and over 70 years, quantity and percentage), sex (female and male, quantity and percentage), underlying disease, symptoms and signs, classification of osteoarthritis and surgical evolution (quantity and corresponding percentages).

A review of the national and international literature on the topic was carried out and the results were contrasted with those presented by other authors who have investigated the topic.

To obtain the primary data, interviews were carried out and the individual medical records of each patient in the study were worked cita. The information was processed computerized, a database was created with the results of the reviews carried out. The results obtained were grouped into statistical tables for analysis and discussion. The Kellgren and Lawrence assessment method was used to classify osteoarthritis. cited by Torres et al., (7) (Table 1). =

Grade 1	Questionable narrowing of the joint space and possible thin osteophytes.
Grade 2	Defined osteophytes and possible narrowing of the joint space.
3rd grade	Multiple moderate osteophytes, definite joint space narrowing, little sclerosis, and possible bone contour deformity.
Grade 4	Large osteophytes, significant narrowing of the joint space, severe sclerosis and defined bone contour deformity

Table 1. Kellgren and Lawrence valuation method

The authors declared their commitment to confidentiality and protection of the information collected during the research; patients' acceptance of participating in the study was requested through informed consent. Authorization was also requested from the management of the Provincial General Hospital, approval from the Ethics Committee and the Scientific Council of the University of Medical Sciences for the execution of the study.

Results

According to age groups and sex, the most representative age group was 50 to 59 years old with nine patients (32.14%). 57.14% belonged to the female sex and 42.85% to the male sex (Table 1)

age group	Sex				Total	
	Male		Female		No.	%
	No.	%	No.	%		
Under 50 years	3	25	4	25	7	25
From 50 to 59 years	6	fifty	3	18.75	9	32.14
From 60 to 69 years	1	8.33	6	37.5	7	25
70 years and more	2	16.66	3	18.75	5	17.85
Total	12	100	16	100	28	100

Table 1. Distribution by age group and sex of the sample of patients undergoing surgery for coxarthrosis at the Camilo Cienfuegos Provincial General Hospital of Sancti Spiritus, 2022

Source: patient interview Regarding the behavior of the underlying diseases in the patients of this study, other underlying diseases stood out in both sexes (50%), followed by high blood pressure (25%) (Table 2).

Disease of base	Male	Female	Total	
	No.	No.	No.	%
Hypertension arterial	2	5	7	25
Ethyl chronic	1	0	1	3.57
Diabetes mellitus type 2	1	1	2	7.14
Accident Vascular Brain	0	1	1	3.57
Disease of Perthes	0	1	1	3.57
COPD	0	1	1	3.57
evil syndrome Absorption	0	1	1	3.57
Others	8	6	14	fifty
Total	12	16	28	100

Source: patient interview

Table 2. Underlying diseases in relation to sex of patients undergoing surgery for coxarthrosis at the Camilo Cienfuegos Sancti Spiritus Provincial General Hospital, 2022

In the distribution of symptoms and signs in patients with coxarthrosis, all patients reported suffering from limitation of external rotation and abduction movement (100%), and 92.85% reported suffering from deterioration in muscle strength. The left hip had the greatest impact on the patients (60.71%) (Table 3).

Symptoms and signs	No.	%
Pain	16	57.14
Joint stiffness	twenty-one	75
Deterioration of muscle strength	26	92.85
Limitation of movement (external rotation and abduction)	28	100
Hip	No.	%
Right	eleven	39.28
Left	17	60.71
Total	28	100

Table 3. Symptoms, signs and operated hip in patients undergoing surgery with a diagnosis of coxarthrosis at Hospital General Provincial Camilo Cienfuegos Sancti Spiritus, 2022

Source: patient interview

In the classification of coxarthrosis of the patients in the study, grade 4 prevailed with 17 patients (60.71%), followed by grade 3 with six patients (21.42%) (Table 4).

Classification	No.	%
Grade 1	0	0
Grade 2	5	17.85
3rd grade	6	21.42
Grade 4	17	60.71
Total	28	100

Table 4. Classification of patients undergoing surgery for coxarthrosis at Hospital General Provincial Camilo Cienfuegos Sancti Spiritus, 2022

Source: physical examination and radiological studies

It was observed that 92.85% (26) of the operated patients had a satisfactory evolution and only 7.14% (2) were not satisfactory due to complications in

the middle of the surgical procedure, which led to the procedure being rescheduled for another time. occasion once meeting the optimal state of health to undergo surgery (Table 5).

Evolution surgical	No.	%
Satisfactory	26	92.85
Not satisfactory	2	7.14
Total	28	100

Table 5. Surgical evolution of the hips in patients undergoing surgery with a diagnosis of coxarthrosis at Hospital General Provincial Camilo Cienfuegos Sancti Spiritus, 2022

Source: patient interview

Discussion

According to the World Health Organization, [8] the decade between 2021 and 2030 has been called the decade of healthy aging. Osteoarthritis is a leading cause of disability in adults, in analysis of temporal variables, age-related, geographic and site-specific trends in the burden of osteoarthritis may benefit policy decisions, if trends continue as before. It has been calculated, where it is estimated that almost one billion individuals will have some type of osteoarthritis in the year 2050.

In a study carried out by Gutiérrez, [9] on patients treated at the Santa María del Socorro Hospital in Ica with a diagnosis of osteoarthritis, the average age of the patients ranged between 61-80 years, of which 71.6% belonged to the female sex. Pain was the predominant clinical manifestation (96.6%), joint stiffness occurred in 52.1% and joint deformity in 37.7%. De León, [10] studied 86 patients undergoing total hip arthroplasty for primary coxarthrosis, 60% were female. The average age was 66.5 years.

Silva, [11] refers to a study carried out in Spain in 2016, the number of subjects with hip osteoarthritis after the initial interview was 396, with a sample of 166 subjects. The prevalence of hip osteoarthritis was 5.13%, of which 95.21% of the cases were diagnosed clinically-radiographically and 91.57% were previously diagnosed. The factors associated with hip osteoarthritis were overweight and obesity, the peak prevalence was observed in subjects ≥ 80 years of age, data that did not coincide with our study as the age group between 50-59 years was the one with the highest prevalence, female sex showed greater statistical significance, coinciding with the study carried out.

Pazarán et al., [12] carried out a descriptive, cross-sectional study in 94 records of older adult patients with a mean age of 72 years who underwent hip arthroplasty for coxarthrosis. The female sex predominated (67%), complications after surgery were present in 16%, where in our study unsatisfactory surgeries were represented by 7.14%. It was observed that 71.3% had no problems with mobility, 80% had no problems with personal care, 55.1% had little pain, a figure close to those found in our study (57.14%).

The results in the descriptive study of clinical records of patients who had a diagnosis of coxarthrosis undergoing surgical treatment by Vargas, [13] showed that 52% belonged to the female sex. In the clinical characteristics of those studied, 12% suffered from high blood pressure and 8% from diabetes. The data related to high blood pressure (25%) in our study were different, but not in diabetes (7.14%). 100% had limitation in active and passive hip mobility, stiffness at the beginning and with grade IV osteoarthritis, data with which we agree in our research in the limitation of movement (100%), something different from stiffness (75%). and grade IV osteoarthritis (60.71%). Right hip involvement prevailed in 52%, data with a certain difference in relation to the affected right hips (39.28%) in our research.

Sánchez, [14] in his study carried out in the spine and hip service, information was collected on all patients who underwent cementless arthroscopy (THA) using the clinical records, as well as the direct questioning and examination of the patient. 401 patients were studied, of which 73% of them presented the diagnosis of aseptic loosening of cementless THA with a history of coxarthrosis as a surgical complication, data that do not coincide in our study since this indicator was represented as an unsatisfactory post-surgical element in 7.14%.

Moreno et al., [15] evaluated 45 records of patients admitted to the joint replacement service undergoing total hip arthroplasty with a diagnosis of rheumatoid arthritis, of which 40 met the inclusion criteria, the average age was 53 years and the sex was female. The predominant one. The operated hip corresponded to 60% on the right side and 40% on the left side. Complications were 12.5% of the patients studied, which does not correspond to the results obtained in our study.

Conclusion

In conclusion, patients with a diagnosis of coxarthrosis operated on at the Camilo Cienfuegos Provincial General Hospital of Sancti Spiritus in 2022 were described, which made it possible to determine that this procedure achieved good results and with a low percentage of complications.

Conflict of interests

The authors declare that does not exist an interest conflict.

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