

Research Article

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Generalized Osteoarthritis in the Service of Rheumatology of the Point G Hospital

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Summary

Objective: To determine the frequency of generalized osteoarthritis patients admitted in the Department of Rheumatology of the Point G hospital.

Methodology: Retrospective study on 2 years [01/01/2014 to 31/12/2015] of patient records. Was included any patient meeting the diagnostic criteria of the generalized osteoarthritis.

Results: A total of eighty four (84) cases out of 413 patients with osteoarthritis presenting a frequency of 21.3%. The female predominated with 69.3% (61 cases). The mean age of the patients was $61.37 \pm 12,45$ years. The spine pains motivated consultation for 54 patients (61.9%). Spinal osteoarthritis was constant and the lumbar osteoarthritis was 96.6% (85 patients). High blood pressure was associated in 48.9% of patients while patients with gout represented 12.5% (11 cases). Seventy six patients (76%) met the criteria for American College of Rheumatology and 2 patients (2.3%) the criteria of Kellgren.

Conclusion: This study revealed a proportion of 21.3% of osteoarthritis patients suffering from generalized osteoarthritis.

Introduction

Osteoarthritis is defined by a cartilage wear associated with a marginal osteophyte of the bone modifications under chondral and minimal inflammation of the synovium. It is the most common joint disease and its prevalence increases with age. The frequency of osteoarthritis will double by 2031 with the lengthening of life expectancy [1,2,3]. Many factors may contribute to the pathogenesis and the progression of the disease. It is a degenerative disease that can reach several joints, especially weight-bearing joints. However, few studies have looked at its multifocal form. The objective of this study was to determine the frequency of generalized osteoarthritis in a population of osteoarthritis patients followed in the Department of Rheumatology of the Point G hospital of Mali.

Keywords: Associated Connective; Osteoarthritis; Overlap Syndrome; Systemic Lupus Erythematosus

Methods

The study was monocentric and carried on 88 patients in the

Department of Rheumatology of the Point G Hospital in Bamako, Mali. It was a retrospective study on 2-year period from 01 January 2014 to 31 December 2015. The information concerned the sociodemographic aspects (age, sex), (joint disease) clinics and radiological. Was included in this study all osteoarthritis patients meeting the criteria for diagnosis of the generalized osteoarthritis. We did not include patients with inflammatory joint disease. The diagnostic criteria used were those of:

1. Kellgren and Moore : presence of nodules of Herberden or interphalangeal osteoarthritis [4] ;
2. ACR of the generalized osteoarthritis: spinal osteoarthritis associated with at least two osteoarthritis locations [5] ;
3. Dougados: bilateral digital osteoarthritis or spinal osteoarthritis associated with a knee bilateral osteoarthritis [6].

The descriptive statistics of the patients and the characteristics of the disease have been realized. Analysis of the data was conducted using SPSS 16, 00.

Results

The results of this study showed a total of eighty-four (84) cases found among 413 patients with osteoarthritis presenting a frequency of 21.3%. The female predominated with 69.3% (61 cases). The mean age of the patients was 61.37 ± 12 , 45 years. The mean duration of symptomatology was 47.24 ± 20.41 months. The spine pains were causes of consultation in 54 patients (61.9%) (Table 1).

Characteristics	Percentage (%)
Demographics	
Mean Age \pm SD (years)	61.3 ± 12.45
Females (%)	61 (69.3%)
Mean duration of symptomatology \pm SD (months)	47.24 ± 20.41
Raisons of consultation	
Spinal pains	54 (61.9%)
Knee pains	29 (32.4%)
Hip pain	5 (5.7%)
Pain Horaire	
Mechanic	52 (59.1%)
Mixte	36 (40.9%)
Antecedent	
High Blood pressure	43 (51.1%)
Diabetes	11 (12.5%)
Gout	3 (3.4%)
Overweight	30/42(71.4 %)

Table 1: Characteristics of patients in the study.

Spinal osteoarthritis was constant, and the lumbar osteoarthritis was 96.6% (85 patients). The knee arthritis has been observed in 70 patients (79.5%) (Table 2).

Type of osteoarthritis	Number	Percentage (%)
Spinal osteoarthritis	88	100
Location of spinal osteoarthritis	-	-
Lumbar spine	-	-
Back spine	85	96.60%
Cervical spine	7	8
Peripheral joints	6	6.8
Knee osteoarthritis	70	79.5
Hip osteoarthritis	55	62.5
Shoulder osteoarthritis	3	3.4
Finger osteoarthritis	2	2.3

Table 2: Repartition of Patients according arthrosis location.

High blood pressure was involved in 43 patients (51.1%), gout in 11 cases (12.5%), and diabetes in 3 cases (3.4%). Overweight was present in 30 of the 42 patients for whom the Body

Mass Index (BMI) was available reflecting a frequency of 71.4% (Table 1). Seventy-six patients (76.1%) and 2 patients (2.3%) met the criteria of ACR and Kellgren respectively (Table 3).

Criteria	Number	Percentage (%)
ACR	67	76,1
Dougados	38	43,2
Kellgren et Moore	2	2,3

Table 3: Repartition of patients according the osteoarthritis diagnostic criteria used.

Discussion

This retrospective study evaluated the generalized osteoarthritis frequency in a population of osteoarthritis patients. We found that 21.3 % of have a generalized osteoarthritis. This rate is close to that of Günther who found 26.8% of generalized osteoarthritis in a hip and knee osteoarthritis population. The frequency in the knee osteoarthritis population and hip osteoarthritis population was 34.9% and 19.3% respectively [6]. Forester in his series on patients with established knee osteoarthritis found a higher rate [7]. A female prevalence was found in this present study. Forester has observed a higher proportion of male (52%) [7]. Studies showed that beyond 60 years old, osteoarthritis is symptomatically observed in 9.6% of men and 18% of women [8,9]. In our study, the spine and knees were the frequent locations of the osteoarthritis. Our results confirmed the predominance of spinal osteoarthritis. The majority of the patients met the criteria of the ACR to the osteoarthritis (76.1%) and Dougados (43.2%). Forester has reported 42% of criteria of Dougados and 41% of those in ACR. With his methodology the criteria of Dougados seemed to be more sensitive than those of ACR and significantly more than those of Kellgren [7].

Limitations of our study

Our research suffers from the following limits including the monocentric and retrospective character. Medical records were used as data sources which result into the problem of missing data. The X-rays available usually involved the symptomatic joints. Painless osteoarthritis joints have not been taken into account. Cases of osteoarthritis have been diagnosed by a doctor on the basis of clinical and radiographic signs. Opposite to studies done on the generalized osteoarthritis which focused on knee and hip osteoarthritis populations the present takes into account all osteoarthritis patients.

Conclusion

This study showed that 21.3% of osteoarthritis patients suffered from generalized osteoarthritis. Lumbar spine seems to be frequently reached, associated with a knee and a hip osteoarthritis. Further advanced studies will contribute to better specify.

Acknowledgments

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Conflict of interest: None

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