ORIGINAL ARTICLE

Frequency and Morbidity of Joint Pain above 40 Years of Age

HUMAIRA[1], ADNAN MAQBOO[2], BAZLA BATOOL[3], *MUHAMMAD ABDUL HANNAN[4], ANSAR LATIF[5]*

ABSTRACT

Aim: To assess the frequency and morbidity of the musculoskeletal system above 40 years of age in OPD pts.
Study design: Cross sectional.
Place & duration of study: OPD of orthopedic department of AIMT hospital affiliated to Khawaja Muhammad Safdar Medical College Sialkot, Pakistan from October to November 2016.
Methods: 620 adult patients coming to OPD for the first time were included. A patient coming for second or more than twice were excluded. Patients coming through accident and trauma center were excluded. A random sample using questionnaire about activities of daily living, dependency, and disability. Irrespective of interview response, a detailed history was taken and subjects underwent an examination of all musculoskeletal system.
Results: In 620 patients, females were 350 while males were 270 showing the ratio of 2.3:1 respectively. Encountering more in the age group 40 to 50 years. The main diagnosis and complaints of the patients were a low backache, osteoarthritis and soft tissue rheumatism. Patients also had neck pain and cervical spondylosis as the study includes higher age group patients.
Keywords: Musculoskeletal system, rheumatism, osteoarthritis, rheumatoid arthritis, low backache.

INTRODUCTION

In orthopedics, the most frequent confront is with trauma cases following the musculoskeletal diseases. One of the most common complaints is joint pain which does not occur a single disease but can be present in different diseases. Joint pain varies from arthritis to connective tissue diseases in which pain and restricted range of motions occur in one or more part of the musculoskeletal system including inflammation in some diseases and involvement of internal organs in some[1].

Arthritis is just one entity of this which includes pain, stiffness, inflammation, and damage to joints. Arthritis is among most common and disabling disease in adults and its severity varies with age and it leads to work limitations[2]. Risk factors include genetic and environmental causes, sex, age, occupation, socioeconomic status, lifestyle, dietary habits, and smoking[3,4].

With these diseases, musculoskeletal system is majorly affected. Therefore, approaches for prevention must be adopted to avoid disability[5].

The most common arthritis is OA clinically defined on the basis of symptoms and findings of physical examination while the presence of osteophytes radiographically along with pain in joint on most days would be diagnosed as OA. It depends on position on body, age and sex along with cofactors such as occupation[6,7].

Most commonly affected joint in females is knee joint. Activities like squatting and knee flexion such as in prayers have no measurable impact in disease progression. Estimating the burden of this disease is difficult, as structural changes occur simultaneously with age[8].

RA is a multisystem disorder of unknown etiology, characterized by chronic destructive synovitis. Risk factors are Economic status, non-recognition of mild disease, reduced survival, and genetic, environmental causes[9,10].

[1]WMO, D.H.Q Mandi Bahauddin. [2]HO, Orthopedics,
[3]HO, Ophthamology, [4]Senior Registrar Orthopedics,
[5]Associate Professor Surgery.
Kh. Safdar Medical College, Sialkot
Correspondence to Dr. Humaira, Email: samadan117@gmail.com, Cell: +923324516797.

Low back pain and soft tissue rheumatism more prevalent in rural areas mostly due to more physical exertion[11]. Disability levels are affected by the quality of the management of disease from place to place. There is an important factor of understanding about self-reporting and doctor diagnosing arthritis to estimate the burden of disease because it needs some time to heal adding to the economic burden.

No work has been done on this topic in this region so: In the present study, we collected the data of our patients coming with musculoskeletal disease and joint pain in OPD of orthopedic surgery department of AIMT hospital Sialkot to assess the morbidity with its frequency in males and females of age 40 years and above to provide better health education, awareness to the disease with its modifiable factors to plan a better healthcare delivery.

MATERIAL AND METHODS

The study was conducted in the OPDs of orthopedic departments of AIMT Hospital, Sialkot. It was a cross-sectional study. Non-probability convenience sampling technique was used. Ethical guidelines in the Declaration of Helsinki were followed. Inclusion criteria were adult consenting patients attending OPD for the first visit in our hospitals. Exclusion criteria were patients coming for the second, or more than two times in the hospital. Patients coming through accident and trauma center were excluded. No bias was taken into consideration regarding caste, color or religion of the pt. A data sheet was prepared. It contained information about the patients. Informed consent was taken in written. Purpose and title of the study were explained to patients. A random sample using questionnaire asked about activities of daily living, dependency and disability in joints causing pain or swelling for more than three weeks in the past three months. This also involved assessment of walking, climbing stairs..

Histories of other serious illnesses were also noted. Examination of hands and feet were done for suspected RA cases. Extensive medical history with questions regarding nutrition, psychological characteristics, and use of medical care, joint pain, aching, swelling, and morning

stiffness, as well as about any associated disability were asked and noted.

Musculoskeletal diseases include joint tenderness, swelling, restriction, and pain on motion. Irrespective of interview response, subjects underwent an examination of all joints. Every new patient was examined by a consultant, not below the rank of a senior registrar of the concerned specialty. Clinical information and the opinion of the consultant were recorded.

For data collection 4 working days were allotted. The data collectors reached OPD at 8 AM sharp and collected data till 2 PM or afterward if there were patients to be seen by the consultant. It was made sure that each new patient was seen by the consultant even after junior doctors had examined the patient before. The final opinion of the consultant was always recorded in all patients. Collected data were analyzed by SPSS v 21.

RESULTS

The basic demographic data of our patients is shown in Table I. The distribution of frequency of males and females having joint pain in accordance with age is shown in the Table II. Data analysis of morbidity depending upon the diagnosis is recorded in Table III.

Table 1: General data

Total no of patients in study	620	100%
Males	270	43.54%
Females	350	56.45%
M:F	1:2.3	

Table 2: Distribution of males and females into various groups related to age.

	40-50 years	**51-60 years**	**Above60 yrs**
Males %	127(20.48%)	86(13.87%)	57(9.19%)
Females %	165(26.61%)	112(18.06%)	73(11.77%)
Total %	292(47.09%)	198(31.93%)	130(20.96%)

Table 3: Morbidity

Diagnosis/symptoms	**n**	**%age**
Cervical spondylosis	92	14.83
Low backache	160	25.80
Osteoarthritis	149	24.03
Rheumatoid arthritis	12	1.93
Synovitis, bursitis, tenosynovitis	17	2.74
Disc disorder	9	1.45
Sciatica	5	0.80
Other arthritis, soft tissue rheumatism	75	12.09
Neck pain	51	8.22
Other joint pain	24	3.87
Nonspecific pain	26	4.19

DISCUSSION

There are 160(25.80%) patients with the complaint of a low backache in our study while studies show the prevalence of a low backache 26.3%[12], 29%[13] and 13.2%[14] respectively. This difference can be attributed to sampling size discrepancy. There are 149(24.03%) patients of osteoarthritis in our study while studies the disease 25.4%[15] and 27%[16] respectively. This difference can be attributed to sampling size discrepancy. There are 12(1.93%) patients with rheumatoid arthritis in our study while studies by Cunningham LS et al[17], Farooqi et al show the disease 1.5% and 3.72% respectively. Other arthritis and soft tissue rheumatism in patients are 75(12.09%) and 92(14.83%) patients are diagnosed with cervical spondylosis due to higher age group with degenerative changes. 51(8.22%) patients came with complaint of neck pain while the study by Jacobson L et al[18]shows neck pain in 6.5%

CONCLUSION

In our study, patients of 40 years and above age having a male-female ratio of 1:2.3 clearly showing the greater percentage of females encountering with the illness of musculoskeletal system. Most of the patients are of 40 to 50 years of age. Low backache is the most common of all near equal to the prevalence of osteoarthritis. While other arthritis, soft tissue rheumatism, and cervical spondylosis are also found in most patients.

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