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PREVALENCE OF COMMONEST MUSCULOSKELETAL DISORDERS IN PATIENTS VISITING MUSCULOSKELETAL CLINIC IN P.M.R DEPARTMENT OF H.N.B BASE GOVERNMENT TEACHING HOSPITAL – SRINAGAR – PAURI GARHWAL, UTTARAKHAND-INDIA

Medical Science

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ABSTRACT

AIM - Musculoskeletal disorders (MSDs) are soft tissue injuries that occur gradually over time and affect the muscles, tendons, ligaments, joints and nerves. These conditions develop when one or more of these tissues are used for a long period of time without adequate rest. The common MSD seen comprises of low backache (LBA), different types of arthritis, carpal tunnel syndrome etc. LBA is a common problem and the highest prevalence is seen in patients aged 40to 60 years. Approximately 60-80% of the world's population experience back pain at sometime in their lives. Osteoarthritis (OA) is a major health problem in terms of its prevalence, associated disability and effect on the quality of life. It is the most common form of arthritis worldwide and the leading cause of mobility related disability in the elderly. The best way to prevent MSDs is to educate the people about risk factors and preventive strategies. OBJECTIVE -The present study was planned with an objective to know the prevalence of commonest MSDs of the patients attending musculoskeletal clinic of P.M.R Department in H.N.B Base Teaching Govt. Hospital, Pauri garhwal-Uttarakhand, India. MATRIAL & METHOD- The study was an observational department based survey. A total of first 100 patients irrespective of age and sex, attending the out-patients department of P.M.R were included in the study. A semi-structured questionnaire which was based on the demographic profile and the diagnosis of MSDs was administered to collect the relevant data. RESULT-The results showed that the mean age of patients was 43 years. The prevalent morbidities in patients were LBA(33%),OA(25%),Cervical spondylosis (13%), Frozen shoulder(11%),Rheumatoid arthritis(4%),Lumbar spondylosis (4%), P.I.V.D (1%), Carpal Tunnel syndrome(1%),Osteoporosis(1 %), Gout , Kypho-scolosis, Tennis elbow and Sciatica(1 %)each and Ganglion(1%)each.

KEYWORDS:

Musculo skeletal disorders, Prevalence, Risk Factors, P.M.R (Rehabilitation medicine).

INTRODUCTION

Musculoskeletal medicine in primary care embodies all medical disciplines that deal with the diagnosis of acute and chronic conditions affecting the musculoskeletal system in adults and children, including the psychosocial impact of these conditions. Musculoskeletal conditions may result from a wide range of processes including injury, inflammation, infection, metabolic, neoplastic or endocrinological conditions and the normal aging process. Musculoskeletal medicine incorporates aspects of orthopedics, rheumatology, neurology rehabilitation medicine and pain medicine.

Musculoskeletal medicine includes common ailments such as whiplash, back and buttock pain etc. where findings on radiological investigation do not often correlate strongly with the clinical presentation, requiring a detailed clinical examination to assess biomechanical dysfunction and to interpret referred pain patterns. This subspecialty provides professional links between medical practitioners and allied health disciplines such as physiotherapy, occupational therapy and exercise physiology. Musculoskeletal conditions cause a significant pain burden in the community that often involves complex psychological processes. Psychological conditions can result in somatic pain and many people with chronic pain have comorbid psychological diagnosis.

The successful management of musculoskeletal conditions requires a holistic, patient centered approach. General practice plays an important role within the healthcare system in the prevention, early detection and management of chronic disease, including musculoskeletal disease.

In a large study musculoskeletal conditions accounted for 15.4% of general practice encounters in 2009–2010, and were the third most common reason for presentation.1 Back complaints accounted for 3.1% of reasons for presentation, followed by knee (1.4%), foot/toe (1.1%), shoulder (1.1%), neck (1.0%), leg (0.8%) and other (0.7%).6 The nature of general practice provides the opportunity for early screening for chronic disease and enables preventable risk factors to be addressed early. For example, the early diagnosis and management of rheumatoid arthritis greatly reduces long term joint damage and improves outcomes. General practitioners need to be able to diagnose rheumatoid arthritis as early as possible in order to optimize outcomes for patients.[2]

Up to 18% of women and 10% of men aged over 65 years have symptomatic osteoarthritis characterized by joint pain and mobility impairment. Comprehensive assessment leading to an early diagnosis and appropriate intervention can significantly relieve signs and symptoms and expedite joint replacement when required.[3]

Half of all women and a third of all men will suffer minimal trauma fractures secondary to osteoporosis.4 Early identification and management can prevent many of the longer term disastrous consequences.4The impact of musculoskeletal conditions on quality of life is large, not only in terms of activity limitation and functional restrictions, but also from pain and self perceived state of health. For example, about 10% of people with rheumatoid arthritis reported very high levels of psychological distress.5 Independent living of a large proportion of people with arthritis and musculoskeletal conditions is compromised and many experience psychosocial changes in their lives such as a change in marital status and employment as a result of their disease or condition.5Through both direct intervention and promotion of self management strategies, the GP clearly has a critical role in the management of these and other musculoskeletal conditions, which continue to increase in incidence and prevalence with our aging population and poor health, secondary to obesity and life style choices.

Many countries has incorporated MSK medicine essential in primay care for e.g - Australian GPs according to the Australian National Musculoskeletal Core Competencies6 and by the global curriculum recommendations of the International Bone and Joint Decade for Undergraduate Curriculum.7 In addition, guidelines recommendation from the musculoskeletal medicine by the Australasian Faculty of Musculoskeletal Medicine8 and the evidenced based Clinical guidelines for musculoskeletal diseases of The Royal Australian College of General Practitioners.9 Musculoskeletal disorders (MSDs) are soft tissue injuries that occur gradually overtime and affect the muscles, tendons, ligaments, joints and nerves. These conditions develop when one or more of these tissues are used for a long period of time without adequate rest. Most work related MSDs are caused either by the work itself or by the working environment such as through sports, music or other hobbies.10They can also result from fractures sustained in an accident. These conditions are often focused on a joint and typically affect the back, neck, shoulders and upper limbs and less

often they affect the lower limbs. The common MSDs encompass low backache (LBA) and different types of arthritis, carpal tunnel syndrome, tendonitis, bursitis and epicondylitis (tennis and golfer's elbow) etc.10, 11 LBA is a common problem and a frequent reason for visiting a physician. The highest prevalence is seen in patients aged 45 to 65 years.2Approximately 60- 80% of the world's population experience back pain at sometime in their lives and it is reported that work absence, has increased significantly in the last 30 years due to back pain in particular. Only a small number of patients with LBA have a pathologically definable problem. It is usually characterized by dull, continuous pain and tenderness in the muscles or their attachment in the lower lumbar, lumbosacral or sacroiliac regions. Pain is often referred to the leg, along the distribution of the sciatic nerve. LBA accounts for 30 to50% of complaints encountered by general practitioners. The common causes of LBA include faulty posture, pregnancy, prolapsed intervertebral disc, lumbo sacral strain, osteomyelitis, pott's spine, osteoporosis, osteomalacia, spinabifida, rheumatoid arthritis, osteoarthritis, kyphosis, scoliosis, lordosis etc. It may also occur as referred pain in pancreatitis, cholecystitis, uterine or rectal prolapse, pelvic inflammatory disease and sometimes it is associated with depression.12Osteoarthritis (OA) is a major health problem in terms of its prevalence, associated disability and effect on the quality of life. It is the most common form of arthritis worldwide and the leading cause of mobility related disability in the elderly. Patients usually complain of joint pain, stiffness and swelling which are worsen after activities.13-15According to the World Health Organization, O.A is the second most common musculoskeletal condition (30%) after backpain (50%). The reported prevalence of O.A from a study in rural India is 5.78%. In India, O.A of knee joint is more common, more prevalent and more commonly associated with symptoms in women than O.A of hip joint. O.A, also known as degenerative joint disease, represents failure of the diarthrodial (movable, synovial lined) joint, which is characterized clinically by pain and functional limitations, radio graphically by osteophytes and joint space narrowing, and histopathologically by alterations in cartilage and subchondral bone integrity.[10,12,16]

OBSERVATIONS AND RESULTS

TABLE 1 – DEMOGRAPHIC PROFILE OF PATIENTS

Parameter	No. of patients (N)	Percentage (%)
Age in years	Mean = 43 years	%
10 - 20	2	2%
21 - 30	11	11%
31 - 40	26	26%
41 - 50	29	29%
51 - 60	27	27%
61 - 70	3	3%
71 - 80	2	2%
Total	100	100
Gender		
Female	71	71%
Male	29	29%
Family history		
Present	51	15.17%
Absent	285	84.82%
Socioeconomic status		
Upper	02	2%
Upper middle	24	24%
Lower middle	49	49%
Upper lower	12	12%
lower	13	13%
Type of disease		
Low back ache	33	33%
Osteoarthritis knee	25	25%
Cervical Spondylitis	13	13%
Frozen shoulder	11	11%
Rheumatoid Arthritis	4	4%
Lumber Spondylitis	4	4.16%
P.I.V.D	2	1.78%
Carpal tunnel	2	1.48%
Osteoporosis	1	1.19%
Gout	1	0.59%
Kyphoscolosis	1	0.59%
Tennis elbow	1	0.59%
Sciatica	1	0.59%
Ganglion	1	0.29%
Occupation		
Student	15	15%
Housewife	61	61%
Labours	13	13%
Employees	11	11%

CONCLUSION

This study provided important information regarding the demographic profile of MSDs inpatients attending H.N.B.Base Teaching hospital Government Hospital Srinagar Uttarakhand India. The overall prevalence of MSDs was 2% (based on total O.P.D attendance in the given month).The mean age of patients was 43 years. The most prevalent morbidities in patients were LBA and OA knee. The risk for developing MSDs can be predicted and preventive strategies may be adopted at individual and mass levels. It can be concluded that timely and accurate surveillance of risk factors could enhance prevention of MSDs and be used to monitor its effects. However, authors recommend that more advanced studies involving multiple centres need to be carried out. In term of holistic approach if preventive measures are taken in an appropriate way the progress of degenerative factors causing musculoskeletal problem can be prevented in a big way.

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