



ANALYSIS OF ORTHOPAEDIC PROBLEMS SECONDARY TO WORK FROM HOME DURING LOCK DOWN PERIOD OF COVID-19 PANDEMIC

***Dr. Satya Kumar Koduru, ¹Dr. Makkena Laxman, ²Dr. Vamsi Krishna V., ³Dr. Arjun Kumar and ⁴Dr. Kiran Raju**

*Prof and Head of Orthopaedics, Nri Academy of Sciences, Andhra Pradesh.

^{1,2,3}Assistant Prof, Nri Academy of Sciences, Andhra Pradesh.

⁴Junior Resident, Department of Orthopaedics, Nri Academy of Sciences, Andhra Pradesh.

***Corresponding Author: Dr. Satya Kumar Koduru**

Prof and Head of Orthopaedics, Nri Academy of Sciences, Andhra Pradesh.

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INTRODUCTION

In December 2019, A New Disease Was Recognized In Wuhan, China. The Outbreak Was Declared A Public Health Emergency Of International Concern On January 30 2020, And The World Health Organization (Who) Announced A Name For This Virus [Sars (Severe Acute Respiratory Syndrome)-Cov-2] And For The Disease (Covid-19) On February 11 2020, And Formally Declared It A Pandemic One Month Later On March 11 2020.^[1] Several Large IT Companies, According To Estimates, Has 90-95% Of Its Employees Working From Home. Many schools, colleges, Companies And Firms Shut Operations After The Nationwide Lockdown Was Announced On March 25th 2020. Initially Imposed For 21 Days, The Lockdown Was Extended To July 8th As The Number Of Covid-19 Cases Increased In The Country.

Aim: To Analyse Orthopaedic Problems Secondary To Work From Home In Otherwise Normal Individuals. Orthopaedic Problems Encountered By The Public During Lockdown Period & How To Manage Such Problems.

Duration of The Study: 06 Months.

MATERIALS AND METHODS

Problems of Lack of Sleep, Over Eating, Head Ache, Blurring Of Vision, Eye Watering, Low Back Pain Neck Pain, Knee & Leg Pains Are Commonly Seen In People Who Were Working From Home During Lockdown Period.

We Have Taken Only Orthopaedic Problems Like Neck Pain, Back Pain, Knee & Leg Pains Into Consideration For This Analysis

All Of Them Are Below 45Years. 25-35 Years Are 26 Cases & 35-45 Are 28 Cases.

24 Women & 30 Men Were Evaluated

Most Of Them Are School Teachers, College Lecturers, Pre & Para Medical Teaching Faculty Of Medical Colleges & Software Employees. Teachers, Lecturers & Faculty From Medical Colleges Were Doing On Line Classes For More Than 06 Hours To Cover The Portions For The Exams.

Average Time Spent By These People On Desktop Or Mobiles To Perform Work Was Around 06-08 Hours A Day Except On Sundays.

Total 54 Patients Attended Orthopaedic Opd At Orthocare Clinic & NRI Academy Of Sciences Since May 2020 To Dec 2020.

After Careful History and Clinical, Laboratory and Radiological Analysis The Following Conclusion Were Made.

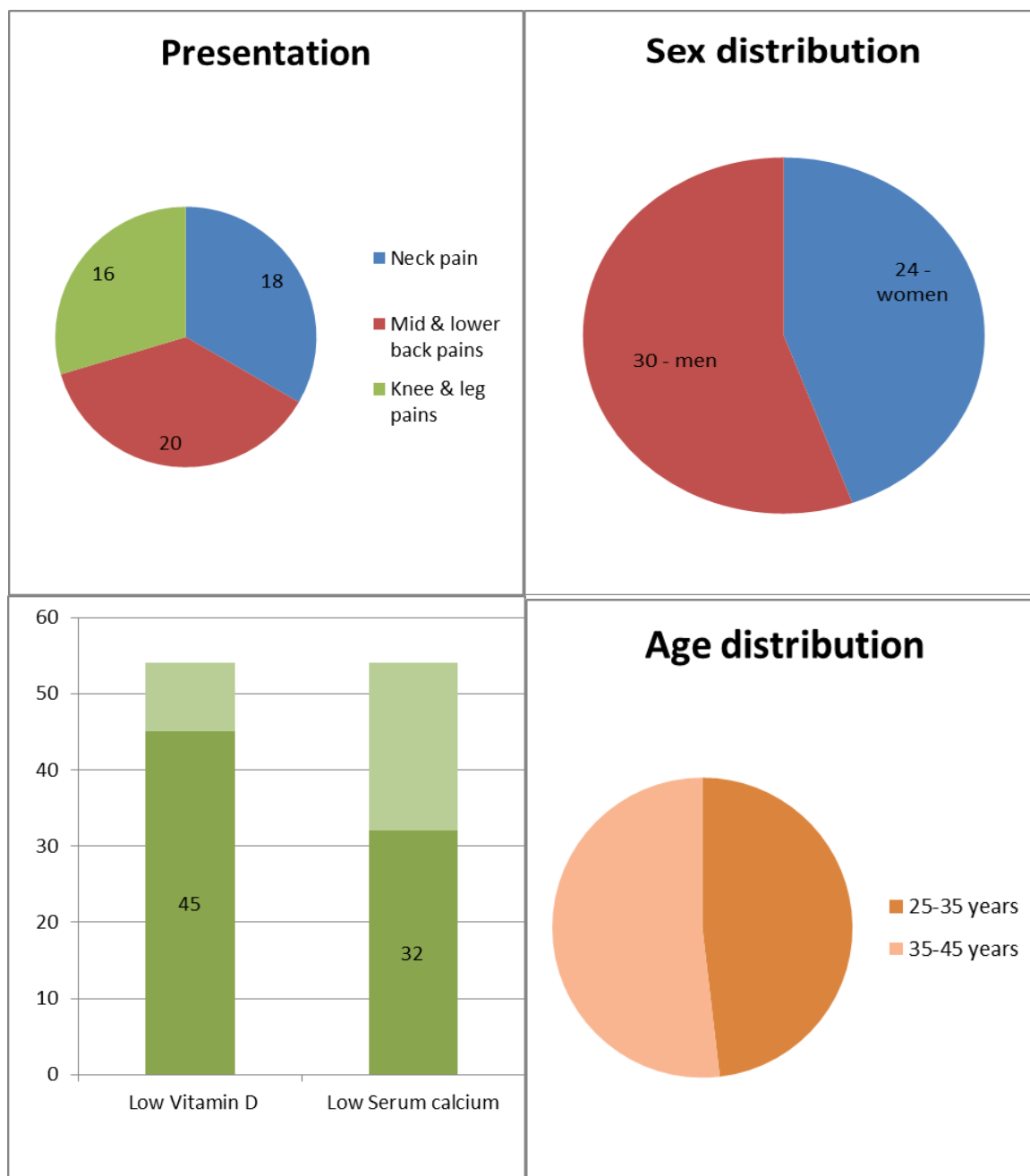
Lack Of Proper Seating Equipment, Lack Of Exercise, Less Exposure To Sunlight, Sitting On A Chair For Longer Duration With Very Little Time To Relax Are Few Reasons That Caused The Above Symptoms.

Sitting For Long Periods Of Time, Incorrect Furniture Or Sitting Position, Using Sofas & Beds To Perform Work Since There Is No Designated Work Area & Related Seating Facility. Since Most Kinds Of Knee Pain That Afflict Office Workers Are Caused By Some Kind Of Inactivity.

Lab Studies Revealed Low Vitamin D Levels in 45 cases out of 54, low serum calcium readings in 32 cases With No Positive Radiological Evidence.

Xrays of Knees, Cervical And Lumbar Spines Showed Basic Age Related Changes And No Gross Abnormalities Noted.

Out Of 54 Patients 18 Of Them Came With Neck Pain With No Radiation, 20 With Mid And Low Back Pain And Rest With Knee And Leg Pains.



1. Xray Images Of One Of The Patient With Knee Pains.



2.Xray Images Of Patient With Low Back Pain.

3.Xray Images Of Patient With Neck Pain.

Inclusion Criteria

1. Patients Who Came With Neck Pain Or Mid Back Or Low Back Pain Or Knee&Leg Pains Are Selected
2. Who Attended Work From Home
3. Age Group Between 25-45

Exclusion Criteria

1. Previous History Of Joint Pains
2. Known Rheumatoid Or Gouty Arthritis Cases
3. Who Didn't Agree To Be Part Of This Study

We Also Found Increase In Weight During Lock Down Period In Atleast In 26 Cases. Average Of 4-5 Kgs Of Weight Was Gained In These Cases Due To Multiple Eating Habbits & Increased In Take Of Caffeine And Sugar Due To Stay At Home. Weight gain was more in men which is almost 20 out of 26 reported. After taking a deep look into the history we found that these men were taking alcohol during morning hours due to work from home gives them a chance to have alcohol even during work days. Previously these men were consuming alcohol only during weekends.

After Careful Analysis, We Suggested The Following - Life Style Modifications, Physical Therapy In The Form Of Muscle Strengthening, Stretching Exercises, Meditation, Exposure To Sunlight With Balanced Diet Along With Basic Medication To Get Rid Of Pain. Even The Seat Played A Big Role Hence It Was Advised To Adopt A Chair Which Supports The Back&Neck.

Patients In Whom Evidence Of Vitamin D Deficiency was Found Were Given Injection Vitamin D600,000iu Shots Depending Upon The Result. Almost 45 Patients Ended Up With Vitamin D Deficiency. Calcium supplementation was given for patients with hypocalcemia.

Only Plain 1gm Paracetamol Was Given To Get Rid Of The Pain.

Also Suggested Local Application Of Gels.

All The Patients Were Called For Follow Up Once A Month And Analysed Them.

1. Visual Analog Score For Pain Subjective Evaluation Of Pain Reported By Each Patient On Average Since The Last Visit. Minimum = 0. Maximum = 10

Patients With Vitamin D Deficiency And With Spondylotic Changes Responded Well For The treatment Suggestions Given To Them At The End Of 3months. Remaining All Responded Well With Life Style Modification, Exercise And Minimal Medication. Our Nutritionist Gave Them A Balanced Diet Plan For Lockdown Period Which Helped Them To Attain The Pre Covid Weight.

DISCUSSION

Complaints Of Neck And Back Problems Have Increased As People Are Unable To Get Consultation With Qualified Persons During The Lockdown. "Intervertebral Disc Prolapse Is Quite Common Among People Who Sit In Unergonomic Positions For Longer Duration And Work On Their Systems. "This Eventually Ends In An Unnatural Curvature In The Spine. Pain In Shoulders, Mid, Low Back And Neck Are A Symptoms Of This Issue. This Could Cause Spondylosis Subsequently.

The Primary Reason For This Is Due To The Unergonomic Seating Arrangement Most People Have At Their Homes. Work From Home Has Been The Latest Culprit To Affect The Skeletal Health Of The Public And A Lot Of Patients Are Reporting Issues With Their Necks And Backs These Days,"

Getting More Active Is The Best Way To Get Out Of It!

Tips To Get Away With Orthopaedic Issues Related To Work From Home^[2]

Make Sure Your Workplace Supports Your Neck And Back -Many People Working From Home Don't Have A Dedicated Office Space, And It's Tempting To Work From The Couch Or Bed. While This May Seem More Comfortable Than Sitting At A Chair And Table, It Can Be Harmful For Your Neck And Back.

A Good Rule To Follow Is Making Sure The Top Of Your Screen Is At Eye Level When Sitting Erect, And You Are Sitting In A Chair That Gives You Some Lumbar Support. If Your Chair Has No Lumbar Support, Use A Small Pillow In The Natural Curve Of Your Lower Back To Accomplish This. Try To Adjust Your Chair And Workstation To Allow For The "Rule Of 90s" (90 Degree Bend At Knee/Hip/And Elbows) To Decrease Joint And Muscle Strain. Sitting Straight Will Help Prevent Neck, Shoulder And Lower-Back Strain That Can Occur From Slouching.

Neck And Back-If You Are Feeling Neck Pain, Try Tilting Your Head From Side To Side, Followed With Nodding And Gently Shaking Your Head A Few Times. To Ease Back Pain, Try Rolling Your Shoulders Forward And Backward, Or Extending Your Arms To Your Sides And Squeezing Your Shoulder Blades Together For A Few Seconds. Stretch Your Lower Back By Standing And Reaching Both Arms Toward The Ceiling, And Tilt To The Right And Left To Stretch Your Sides.

Feet And Calves-If Your Legs And Feet Are Feeling Numb Or Stiff, A Calf Stretch Can Help. Stand Tall And Place One Foot A Large Step Behind The Other. Slowly Bend Your Front Knee While Pushing Your Back Heel Into The Ground And Keeping Your Back Knee Straight. Hold For 10 Seconds And Repeat On The Other Side. To Relieve Ankle Soreness, Lift Your Leg While In A Seated Position And Rotate The Foot A Few Times.

Stay Active - Sitting In One Position For An Extended Period Of Time Could Cause Pain In Your Legs And Especially Your Hips. We Recommend Getting Up To Move Around Every Hour And Developing A Workout Routine, Even If It's As Simple As Going For A 15-Minute Walk.

CONCLUSION

After Careful History Taking, Properly Examining, Spending More Time With The Patient Helped Us To Find Out The Details Of The Problems They Faced. Most Of These Problems Are Due To Work From Home & Covid-19 Pandemic. Normally We Don't To Get To See So Many Young & Active People Coming To Hospital With These Issues.

Almost All 54 Patients Did Well With The Life Style Modifications Suggested, Diet Schedules, Exercise Therapy, Cycling, Meditation & Following The Advises Given Below

- Make Sure You Get Up And Stretch At Least Once Every Single Hour.
- Adjust Your Chair, So You Are Not Sitting In A Low Position Most Of The Time.
- Propping Your Leg Up On A Cushion While You Relax Is Very Good For It.
- Regularly Perform Stretches That Are Good For Your Overall Knee Health, Such As Stretches That Work The Hamstrings And Quadriceps.

If Your Job Keeps You At Your Desk For Long Periods Of Time, Make Sure That You Take Some Time During And After Work To Get Some Physical Activity(Cycling /Swimming/Walking) And Keep Your Muscles And Joints In Good Working Order. Even A Short Walk Every Day Can Do A World Of Good. Though Office Environments May Not Be Conducive To Getting All Of The Activity We Should Every Day, There Are Lots Of Little Things You Can Do To Turn Your Sedentary Lifestyle Into A More Active One.

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