Perception Regarding Elbow Pain among Ortho OPD Patients of Hilly Area

Abstract: Background: Elbow pain is a common presenting symptom in primary care. Pathology can arise from any component of the joint including tendons, bursae, bones, or nerves. This study was undertaken with the objective to assess the knowledge about preventive factors and practices during elbow pain among Ortho OPD patients in civil hospital Rohru. Material & Methods: This cross sectional study was conducted between Aug- December 2020 among Ortho OPD patients in civil hospital Rohru selected by convenience sampling technique. Information regarding their socio-demographic characteristics, knowledge regarding prevention and practices during elbow pain were obtained using a self-administered, pre-tested, semi-structured questionnaire. Data was analyzed using epi info v7 software using appropriate statistical tests. Results: In the present study 35% (140) of the patients fell were below 40 years of age while 65% (260) were above 40 years. 54% (216) of patients were male and 46% (184) were female. Among the total patients maximum 312(78%) replied that they applied of pain relief gel during pain followed by a maximum 335(83.75%) replied that taking frequent breaks from repetitive tasks helps in prevention of elbow injury or pain followed by interchanging hands during activities, such as when sweeping, or gardening 311(77.75%), avoid overuse of arm by doing repeated movements 302(75.5%) and avoid lifting a heavy weight 301(75.25%). In the present study, maximum 335(83.75%) replied that they applied of pain relief gels upon elbow during pain followed by avoid lifting heavy weight314(78.5%). Rest the elbow joint 313(78.25%), immobilize the elbow 304(76%), avoid any stress on elbow 301(75.25%) and pain relief medications 301(75.25%). Conclusion: Elbow pain can be best treated with rest, stretching, ice and physical therapy. Exercising and stretching may reduce pain, and can aid in recovery.

Keywords: Elbow pain, knowledge, preventive factors, practices.

INTRODUCTION

Elbow pain is any type of pain that comes from structures in the elbow joint and/or in structures adjacent to the elbow joint. The causes of elbow pain are numerous. Most elbow pain is due to overuse or strain on the elbow joint components, but some causes are due to trauma, infection, and/or autoimmune processes (https://www.emedicinehealth.com).

Risk factors for elbow pain are numerous and range from engaging in repetitive activities and participation in sports to those associated with infection, trauma, and rheumatoid arthritis (https://www.emedicinehealth.com; & https://www.verywellhealth.com).

Treatment of elbow pain involves rest of the joint by reducing its motion and stress. Other treatments depend on the cause of the joint pain. Orthopedic consultation is often advised to design appropriate treatment protocols that may require casting and surgical intervention (https://www.medicinenet.com).

Rest, ice packs, and compression of the elbow joint are commonly used home remedies. There are others, but before their use, discuss them with a physician (https://www.versusarthritis.org).

For most patients with elbow joint pain, if treated quickly and appropriately, the prognosis is very good. The prognosis decreases if the joint pain is allowed to become chronic or is due to an underlying process that may be progressive if not treated (https://www.medicalnewstoday.com).
A number of studies conducted in different parts of India reveal widespread ignorance about the elbow pain among people. As this disease largely relies on prevention and the right information at the right time is essential to bring about a behavioral change when the population is most receptive. Hence, this study was undertaken with the objective to assess the knowledge about preventive factors and practices during elbow pain among Ortho OPD patients in civil hospital Rohru.

Objectives of the study
1. To evaluate the knowledge of patients attending Ortho OPD towards prevention of elbow pain in civil hospital Rohru.
2. To evaluate the practices of patients attending Ortho OPD in civil hospital Rohru on having elbow pain.

RESEARCH METHODOLOGY
- Research approach - descriptive
- Research design - descriptive survey design
- Setting of the study - Ortho OPD of civil hospital Rohru
- Study duration - between Aug-December 2020
- Study population - Ortho OPD patients in civil hospital Rohru.
- Sample size - 400 Ortho OPD patients
- Sampling technique - convenience sampling technique
- Sampling criteria - first five patients attending the Ortho OPD of civil hospital Rohru everyday were selected till the completion of sample size after explaining the purpose of the study. Informed consent/assent was taken from them and confidentiality of the selected participants was also maintained.
- Inclusive criteria - patients selected during the day of data collection in study setting and who were willing to participate in the study.
- Exclusion criteria - patients who were not willing to participate in the study.
- Development of tool - knowledge related questionnaires
- Description of tool

Section A - Socio-demographic characteristics of the patients (age, gender etc.).
Sections B - Questions regarding knowledge of preventive factors for elbow pain and practices of patients in case of elbow pain.

RESULTS
The present study was non-experimental descriptive study carried out to evaluate knowledge of preventive factors for elbow pain and practices of patients in case of elbow pain in civil hospital Rohru.

In the present study 35% (140) of the patients fall below 40 years of age while 65% (260) were above 40 years. 54% (216) of patients were male and 46% (184) were female.

Among the total patients maximum 312(78%) replied that taking frequent breaks from repetitive tasks helps in prevention of elbow injury or pain followed by interchanging hands during activities, such as when sweeping or gardening 311 (77.75%), avoid overuse of arm by doing repeated movements 302 (75.75%), avoid lifting a heavy weight 301 (75.25%), avoid making the same hand and arm movements over and over 299 (74.75%), avoid falls on ground 280 (70%), use the correct techniques or positions during activities 278 (69.5%), avoid sleeping on one's side with the elbow bearing chest weight 263 (65.75%), avoid leaning of elbow on the hard surfaces 255 (63.75%), avoid leaning on elbow for prolonged periods 234 (58.5%), warming up before playing sports or exercise 190 (47.5%), stick to the middle of your range of motion/avoid bending or straightening arm 189 (47.25%), avoid injury/fatigue of elbow joint 188 (47%), stretching exercise of elbow regularly 153 (38.25%), stick with smooth movements instead of sharp, jerky ones 134 (33.5%), using a proper-sized grip on sports equipment 124 (31%), avoid working with a bent wrist 101 (25.25%), calcium and vitamin D supplements 101 (25.25%) and eat healthily and balanced diet 89 (22.5%). Among the total patients, 87 (21.75%) didn’t know anything about prevention of elbow injury or pain. (Table-1)

Table-1: knowledge of patients towards prevention of elbow pain

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Preventive factors</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Stretching exercise of elbow regularly</td>
<td>153</td>
<td>38.25</td>
</tr>
<tr>
<td>2.</td>
<td>Avoid working with a bent wrist</td>
<td>101</td>
<td>25.25</td>
</tr>
<tr>
<td>3.</td>
<td>Stick with smooth movements instead of sharp, jerky ones</td>
<td>134</td>
<td>33.5</td>
</tr>
<tr>
<td>4.</td>
<td>Avoid sleeping on one's side with the elbow bearing chest weight</td>
<td>263</td>
<td>65.75</td>
</tr>
<tr>
<td>5.</td>
<td>Avoid leaning on elbow for prolonged periods</td>
<td>234</td>
<td>58.5</td>
</tr>
</tbody>
</table>
6. Avoid leaning of elbow on the hard surfaces 295 63.75
7. Avoid overuse of arm by doing repeated movements 302 75.5
8. Avoid making the same hand and arm movements over and over 299 74.75
9. Interchanging hands during activities, such as when sweeping, or gardening. 311 77.75
10. Take Frequent breaks from repetitive tasks 312 78
11. Stick to the middle of your range of motion /avoid bending or straightening arm 189 47.25
12. Use the correct techniques or positions during activities 278 69.5
13. Warming up before playing sports or exercise 190 47.5
14. Using a proper-sized grip on sports equipment 124 31
15. Take Frequent breaks from repetitive tasks 312 75.25
16. Avoid lifting a heavy weight 301 75.25
17. Stick to the middle of your range of motion /avoid bending or straightening arm 189 47.25
18. Use the correct techniques or positions during activities 278 69.5
19. Warming up before playing sports or exercise 190 47.5
20. Using a proper-sized grip on sports equipment 124 31

Among the total patients maximum 335(83.75%) replied that they applied of pain relief gels upon elbow during pain followed by avoid lifting heavy weight 314(78.5%), rest the elbow joint 313(78.25%), immobilize the elbow 304(76%), avoid any stress on elbow 310(75.75%), pain relief medications 301(75.25%), Cold applications 189(47.25%), stretching exercises for elbow 156(39%), calcium and vitamin D supplements 124(31%), compression & wrapping with elastic bandage 111(27.75%), heat applications 108 (27%), specific and correct type of elbow band 102(25.5%), use elbow sling 87(21.75%) during elbow pain. (Table-2)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Practices</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immobilize the elbow</td>
<td>304</td>
<td>76</td>
</tr>
<tr>
<td>2</td>
<td>Specific and correct type of elbow band</td>
<td>102</td>
<td>25.5</td>
</tr>
<tr>
<td>3</td>
<td>Compression &amp; wrapping with elastic bandage</td>
<td>111</td>
<td>27.75</td>
</tr>
<tr>
<td>4</td>
<td>Use elbow sling</td>
<td>87</td>
<td>21.75</td>
</tr>
<tr>
<td>5</td>
<td>Stretching exercises for elbow</td>
<td>156</td>
<td>39</td>
</tr>
<tr>
<td>6</td>
<td>Avoid any stress on elbow</td>
<td>301</td>
<td>75.25</td>
</tr>
<tr>
<td>7</td>
<td>Rest the elbow joint</td>
<td>313</td>
<td>78.25</td>
</tr>
<tr>
<td>8</td>
<td>Avoid lifting heavy weight</td>
<td>314</td>
<td>78.5</td>
</tr>
<tr>
<td>9</td>
<td>Application of pain relief gels</td>
<td>335</td>
<td>83.75</td>
</tr>
<tr>
<td>10</td>
<td>Pain relief medications</td>
<td>301</td>
<td>75.25</td>
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<td>Calcium and vitamin D supplements</td>
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<td>Heat applications</td>
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<tr>
<td>13</td>
<td>Cold applications</td>
<td>189</td>
<td>47.25</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Elbow pain is a sharp, dull, burning, or pressure discomfort or pain that can be intermittent, constant, or shooting due to a strain, sprain, fracture, dislocation, infection, autoimmune condition, cancer, or trauma to the structures in and adjacent to the elbow joint (https://www.webmd.com 13 June 2021).

Primary care management of elbow pain aims at decreasing stress and increasing the strength of elbow joint. Rest should be relative and the patient should avoid activities that aggravate symptoms. Counterforce bracing (band over muscle body) reduces stress, while rehabilitative exercises and physiotherapy improve muscle strength. Exercises to stretch and strengthen your wrist and forearm muscles can be a big help in preventing elbow pain (https://www.physio-pedia.com 14 June 2021 a; & https://www.physio-pedia.com 14 June 2021 b).

In the present study, among the total patients maximum 335(83.75%) replied that they applied of pain relief gels upon elbow during pain followed by avoid lifting heavy weight 314(78.5%), rest the elbow joint 313(78.25%), immobilize the elbow 304(76%), avoid any stress on elbow 301(75.75%), pain relief medications 301(75.25%), Cold applications 189(47.25%), stretching exercises for elbow 156(39%), calcium and vitamin D supplements 124(31%), compression & wrapping with elastic bandage 111(27.75%), heat applications 108 (27%), specific and correct type of elbow band 102(25.5%), use elbow sling 87(21.75%) during elbow pain.
Other type of treatments that help to heal elbow pain is RICE therapy. This therapy translates to rest, ice, compress, and elevate. This means to rest the affected elbow, ice it to reduce any swelling or pain, then compress it by wrapping the elbow with an elastic medical bandage, and then keep it elevated by using some pillows whenever you can. Use an elbow strap to reduce strain. Physiotherapy exercises will be recommended by your doctor if your muscles in the affected area are weak. These exercises will ensure that any type of stiffness in the elbow joint is reduced while also increasing flexibility as part of the treatment, if the injury to the area is not much, your doctor may also prescribe pain killers or steroid injections to reduce pain and swelling temporarily (https://www.webmd.com 15 June 2021; & https://hcah.in).

Work-related problems causing elbow pain are more resistant to non-operative management. In this situation consider advising patients to take a short period of time off work to help restore function by promoting rest. Follow-up should be tailored to the individual patient, and review after 2–4 weeks depending on severity of symptoms is a reasonable option (https://www.versusarthritis.org; & https://www.medicalnewstoday.com).

**CONCLUSION**

Elbow pain can be best treated with rest, stretching, ice and physical therapy. Exercising and stretching may reduce pain, and can aid in recovery. Still, surgery may be necessary in extreme cases.

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