based on medical evidence "there is an almost religious way of thinking on how to deal with the pathology. It is not an exact science when you choose the physicans you choose the treatment." 2) Relationship with the self and the others as some patients do not feel understood or even shameful and hopeless about their condition. 3) Patients' and Health Professionals' beliefs about the pathology management where common thoughts were the perceived (ab)use of passive therapies, the movement as something dangerous and that OA is "something that you try to resist to, but (surgery) is your destiny." 4) facilitators and 5) barriers of the adherence to therapeutic exercise that revolve around the cost of the therapy, the time needed and the willingness to change life habits. 6) Patients' attitudes towards pathology in which the oldest patients perceive OA as "something I have to accept since I am getting old" and the youngest as "Something I have to fight." 7) Relationship with food in which diet is seen as something that "you force yourself to follow" which is useful only to lose weight and not to preserve a high health status and where overeating is used "to eat your feelings."

Conclusion: Patients suffering from hip and knee OA seem to experience an uncertain care process. The lack of clear explanations and the attitude towards conservative treatment, which is considered as "as a pastime while waiting for surgery," fosters the importance of providing patients with adequate information about the treatment, to shift their beliefs and improve their awareness. This will enhance a patient-centred and shared decision-making treatments.

REFERENCES:

Acknowledgements: This work is part of the project funded by EULAR Health Professionals Research Grant 2020.

Disclosure of Interests: None declared, Helen Slater: Speakers bureau: AstraZeneca; None declared, Chris Littlewood: None declared, Jonathan Drennan: Speakers bureau: AstraZeneca; Aidan O’Shea: None declared, Jonathan Drennan: None declared, Chris Littlewood: None declared, Helen Slater: Speakers bureau: AbbVie PTY LTD 2018, Julius Sim: None declared, Joseph McVeigh: None declared.

Disclosure of Interests: Aidan O’Shea: None declared, Jonathan Drennan: None declared, Chris Littlewood: None declared, Helen Slater: Speakers bureau: AbbVie PTY LTD 2018, Julius Sim: None declared, Joseph McVeigh: None declared.

Disclosure of Interests: POS0161-HPR: BARRIERS AND FACILITATORS RELATED TO SELF-MANAGEMENT OF SHOULDER PAIN: A SYSTEMATIC REVIEW AND QUALITATIVE SYNTHESIS

1 University College Cork, Discipline of Physiotherapy, College of Medicine and Health, Cork, Ireland; 2 University College Cork, School of Nursing and Midwifery, College of Medicine and Health, Cork, Ireland; 3 Manchester Metropolitan University, Department of Health Professions, Faculty of Health, Psychology & Social Care, Manchester, United Kingdom; 4 Curtin University, School of Physiotherapy and Exercise Science, Perth, Australia; 5 Keele University, School of Medicine, Faculty of Medicine and Health Sciences, Keele, United Kingdom

Background: Shoulder pain is a significant cause of pain and disability in the general population. Current research suggests that shoulder pain can be resistant to treatment and is often recurrent. Systematic review-level evidence shows modest short-term benefits for most current treatments. Effective self-management strategies that equip patients with the necessary tools to self-manage their condition are urgently required. However, engagement with self-management is poor, potentially compromising treatment outcomes and contributing to ongoing disability.

Objectives: The objectives of this review were to:
- Systematically identify and appraise relevant qualitative evidence on barriers and facilitators relating to self-management from the perspectives of people with shoulder pain and healthcare professionals.
- Cullate and synthesise this evidence, to gain an understanding of factors that influence self-management of shoulder pain.
- Develop evidence-based recommendations to inform the implementation and delivery of self-management programmes for shoulder pain.

Methods: A meta-aggregative approach to the synthesis of qualitative evidence was used. Twelve databases were searched, from inception to 13 July 2020, to identify studies exploring barriers and facilitators related to self-management of shoulder pain from the perspectives of people with shoulder pain and clinicians involved in the care of such patients. Two independent reviewers identified eligible articles, extracted the data and conducted critical appraisal. Two reviewers independently identified and developed categories, with validation by two further researchers. Categories were discussed among the wider research team and a comprehensive set of synthesized findings was derived.

Results: Sixteen studies were included in the review, exploring several shoulder conditions: shoulder instability; rotator cuff-related pain; dysfunction post rotator cuff surgery; and degenerative rotator cuff tears. From the perspective of patients, three synthesized findings were identified that influenced self-management: (1) support for self-management, including education, patient-centred support, patient empowerment, time, and clinician digital literacy; and (2) preferred management approach, including clinician beliefs, expectations, motivation, therapeutic approach, and therapeutic response. From the perspective of clinicians, two synthesized findings were identified that influenced adherence to self-management: (1) support for self-management, including education, patient-centred support, patient empowerment, time, and clinician digital literacy; and (2) preferred management approach, including clinician beliefs, expectations, motivation, therapeutic approach, and therapeutic response.

Conclusion: Patients and clinicians identified several barriers and facilitators that influenced self-management of shoulder pain. Clinicians’ awareness of these factors could positively influence patient management, enhance patients' ability to self-manage, and improve treatment outcomes.

REFERENCES:

Disclosure of Interests: Aidan O’Shea: None declared, Jonathan Drennan: None declared, Chris Littlewood: None declared, Helen Slater: Speakers bureau: AbbVie PTY LTD 2018, Julius Sim: None declared, Joseph McVeigh: None declared.

Disclosure of Interests: POS0162: PREDICTIVE FACTORS OF A NEW FRAGILITY FRACTURE AFTER WRIST FRAGILITY FRACTURE

1 Unidade Local de Saúde do Alto Minho, Rheumatology Department, Ponte de Lima, Portugal; 2 Hospital de Braga, Rheumatology Department, Braga, Portugal

Background: Fragility fractures (FF) are fractures that result from mechanical forces that would not ordinarily result in fracture, known as low-level (or low energy) trauma. Studies have shown that history of wrist fracture increases the risk for subsequent FF.

Objectives: To assess predictive factors of FF occurring after a wrist fracture.

Methods: Retrospective monocentric study that included patients with a wrist FF observed at the emergency department (ED) in a tertiary center, between 1st January 2017 and 31st December 2018. FF were identified through the International Classification of Diseases and FF were identified after revision of the clinical record. Patients with relevant missing data were excluded. Seven hundred thirty-three wrist FF were identified. After calculating a representative sample (90% confidence interval), 188 patients were included. Their clinical records until 31th December 2020 (2 to 3 years after FF) were reviewed.

Results: Wrist fractures represented 44.3% of the FF observed at the ED.
Most patients were woman (83.5%) with a mean age of 70.7 (SD=11.2) years-old at the time of their wrist fracture. A previous FF was seen in 22.9% of patients and 13.3% had a new FF during the follow-up period. We found an association between the occurrence of a new FF and the number of comorbidities (p=0.012), number of visits to the ED due to falls (p<0.001), previous diagnosis of chronic pulmonary disease (p=0.029) and hematologic pathologies (p=0.047), and the need for hospitalization at time of the wrist FF (p=0.018). No associations were found between the age at the wrist fracture time, number of drugs taken daily nor its type (anxiolytics, antiepileptics, corticoids), previous fracture (and localization), overweight/obesity and other cardiovascular risk factors, endocrinopathies, psychiatric or neurologic disease or other comorbidities. After adjustment for age, gender, anti-osteoporotic treatment and comorbidities, the main predictors of a new FF were visits to the ED for falls (p=0.005), chronic pulmonary disease (p=0.040), hematologic pathologies (p=0.004) and need for hospitalization (p=0.040) (table 1).

Table 1. Multivariate analyses: linear multiple regression for predictive factors of new fragility fracture.

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Unstandardized Coefficients B</th>
<th>Standardized Coefficients Beta</th>
<th>95.0% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.025</td>
<td>0.975</td>
<td>0.924 – 1.030</td>
<td>NS</td>
</tr>
<tr>
<td>Gender</td>
<td>2.065</td>
<td>7.889</td>
<td>0.757 – 82.165</td>
<td>NS</td>
</tr>
<tr>
<td>Number of comorbidities</td>
<td>0.186</td>
<td>1.204</td>
<td>0.846 – 1.713</td>
<td>NS</td>
</tr>
<tr>
<td>Visits to the emergency service for falls</td>
<td>-2.136</td>
<td>0.118</td>
<td>0.026 – 0.529</td>
<td>0.005</td>
</tr>
<tr>
<td>Chronic pulmonary disease</td>
<td>-1.326</td>
<td>0.266</td>
<td>0.075 – 0.940</td>
<td>0.040</td>
</tr>
<tr>
<td>Hematologic pathologies</td>
<td>-4.296</td>
<td>0.014</td>
<td>0.001 – 0.255</td>
<td>0.004</td>
</tr>
<tr>
<td>Need for hospitalization</td>
<td>-2.764</td>
<td>0.063</td>
<td>0.004 – 0.887</td>
<td>0.040</td>
</tr>
<tr>
<td>Anti-osteoporotic treatment</td>
<td>0.157</td>
<td>1.170</td>
<td>0.227 – 6.017</td>
<td>NS</td>
</tr>
</tbody>
</table>

CI: Confidence Interval; NS: non-significant;

Conclusion: Certain comorbidities seem to be associated with new FF. Patients with visits to the emergency service after falls and those who needed hospitalization due to the wrist fracture were more prone to have a new FF. There might be a substantial missed opportunity for intervention in these patients.

REFERENCES:


Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3298

POSO163 INCIDENT FRACTURE RISK PREDICTION USING THE FRAGILITY SCORE CALCULATED BY LUMBAR SPINE RADIOFREQUENCY ECHOGRAPHIC MULTI SPECTROMETRY (REMS) SCANS

D. Ciarle1, P. Pisani2, F.A. Lombardi2, R. Franchini2, F. Conversano2, S. Casiani1, National Research Council, Institute of Clinical Physiology, Lecce, Italy; 1National Research Council, Institute of Clinical Physiology, Lecce, Italy

Background: The main consequence of osteoporosis is the occurrence of fractures due to bone fragility, with important sequelae in terms of disability and mortality. It has been already demonstrated that the information about bone mass density (BMD) alone is not sufficient to predict the risk of fragility fractures, since several fractures occur in patients with normal BMD [1].

The Fragility Score is a parameter that allows to estimate skeletal fragility thanks to a trans-abdominal ultrasound scan performed with Radiofrequency Echographic Multi Spectrometry (REMS) technology. It is calculated by comparing the results of the spectral analysis of the patient’s raw ultrasound signals with reference models representative of fragile and non-fragile bones [2]. It is a dimensionless parameter, which can vary from 0 to 100, in proportion to the degree of fragility, independently from BMD.

Objectives: This study aims to evaluate the effectiveness of Fragility Score, measured during a bone densitometry exam performed with REMS technology at lumbar spine, in identifying patients at risk of incident osteoporotic fractures at a follow-up period of 5 years.

Methods: Caucasian women with age between 30 and 90 were scanned with REMS and DXA. The incidence of osteoporotic fractures was assessed during a follow-up period of 5 years. The ability of the Fragility Score to discriminate between patients with and without incident fragility fractures was subsequently evaluated and compared with the discriminatory ability of the T-score calculated with DXA and with REMS.

Results: Overall, 533 women (median age: 60 years; interquartile range [IQR]: 54-66 years) completed the follow-up (median 42 months; IQR: 35-56 months), during which 73 patients had sustained an incident fracture. Both median REMS and DXA measured T-score values were significantly lower in fractured patients than for non-fractured ones, conversely, REMS Fragility Score was significantly higher (Table 1).

Table 1. Analysis of T-score values calculated with REMS and DXA and Fragility Score calculated with REMS. Median values and interquartile ranges (IQR) are reported. The p-value is derived from the Mann-Whitney test.

<table>
<thead>
<tr>
<th></th>
<th>Patients without incident fragility fracture</th>
<th>Patients with incident fragility fracture</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-score DXA [median (IQR)]</td>
<td>-1.9 (-2.7 to -1.0)</td>
<td>-2.6 (-3.3 to -1.7)</td>
<td>0.0001</td>
</tr>
<tr>
<td>T-score REMS [median (IQR)]</td>
<td>-2.0 (-2.8 to -1.1)</td>
<td>-2.7 (-3.5 to -1.9)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Fragility Score [median (IQR)]</td>
<td>29.9 (25.7 to 36.2)</td>
<td>53.0 (34.2 to 62.5)</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

By evaluating the capability to discriminate patients with/without fragility fractures, the Fragility Score obtained a value of the ROC area under the curve (AUC) of 0.80, higher than the AUC of the REMS T-score (0.68) and of the T-score DXA (0.64), and the difference was statistically significant (Figure 1).

POSO164 THE NEED FOR ANTI-OSTEOPOROTIC INTERVENTION IN POSTMENOPAUSAL WOMEN WITH RHEUMATOID ARTHRITIS BASED ON THE FRACTURE RISK ASSESSMENT

O. Dobrovolskaya1, A. Feklistov1, O. Nikitinskaya1, A. Efremova1, N. Toropsova1, V.A. Nasonova Research Institute of Rheumatology, Department of Osteoporosis, Moscow, Russian Federation

Background: Rheumatoid arthritis (RA) is a chronic disabling disease that is associated with bone loss. Previous studies estimated that approximately...