

# Chronic multimorbidity of a low back disorder or other chronic back defects in the population of the European Health Interview Survey in the Republic of Croatia

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**Background and Aims:** Osteoarthritis of the knee joint is a common disease in the elderly. It is most often characterized by pain, stiffness and swelling of the knee, which progress over time and lead to disability,<sup>[1]</sup> which reduces functional and social activity.<sup>[2]</sup> The aim was to assess pain at rest and during movement and functional activity 12 weeks after rehabilitation with Interferential currents and therapeutic exercises in patients with osteoarthritis of the knee. **Methods:** The study included 54 patients (17 men, 34 women) with mean age of 65.4(9.9) with osteoarthritis grade II and III radiology of the knee joint. Rehabilitation includes ten-day treatment with Interferential currents and therapeutic exercises. Results were assessed by manual muscle testing (MMT), KJ circumference measurement, goniometry, pain (VAS) at rest, descent, ascent of stairs, walking and WOMAC Index, before, 4 and 12 weeks after therapy. **Results:** Statistically significant decrease in swelling( $p<0.001$ ) up to 4 weeks after therapy, reduction of muscle weakness m. quadriceps (MMT)( $p<0.001$ ), increased flexion( $p<0.001$ ), reduced pain(VAS) at rest, going down and upstairs, walking ( $p<0.001$ ), and decreased WOMAC Index( $p<0.001$ ) 12 weeks after therapy were observed. **Conclusion:** The applied rehabilitation program effectively reduces pain at rest and movement, muscle weakness and total WOMAC and increases flexion in the knee joint for at least 12 weeks after treatment, while the swelling is significantly reduced within 4 weeks after rehabilitation.

#### References

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## 5514 - Prevalence and related risk factors of chronic low back pain among health care workers in Morocco

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**Background and Aims:** Chronic low back pain is a common symptom in medical consultation, especially in occupational medicine. It has often a benign cause, however it remains a public health problem through its socioeconomic impact either directly through the cost of healthcare, or indirectly through the frequency of work stoppages. The frequency of chronic low back pain in the professional community is increasing particularly among healthcare workers without a clear predisposing factor. The aim of our study is to identify the risk factors for chronic low back pain among El Ayachi hospital employees and to compare the data with the literature. **Methods:** A questionnaire for all hospital employees was designed, to identify the various intrinsic and extrinsic risk factors in this population. **Results:** The outcomes will describe the population and the association in univariate and multivariate analysis between the risk factors and the occurrence of chronic low back pain.

## 5503 - Chronic multimorbidity of a low back disorder or other chronic back defects in the population of the European Health Interview Survey in the Republic of Croatia

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**Background and Aims:** To assess the prevalence of chronic multimorbidity in patients with a low back disorder or other chronic back defects (BD). **Methods:** We analyzed data from the population-based cross-sectional European Health Interview Survey (EHIS) performed in the Republic of Croatia 2014-2015 by the Croatian Institute of Public Health. Outcome was the point-prevalence of chronic multimorbidity defined as having  $\geq 2$  chronic illnesses out of 14 contained in the EHIS questionnaire. Fourteen targeted illnesses were asthma, allergies, hypertension, urinary incontinence, kidney problems, coronary heart disease or angina pectoris, neck disorder, arthrosis, chronic obstructive pulmonary disease, stroke, diabetes mellitus, myocardial infarction, stroke, depression and the common category "other". **Results:** We analyzed data from 268 participants with BD, and 511 without it. Participants with BD had higher relative risk for any chronic multimorbidity ( $RR_{adj}=2.12$ ; 95% CI 1.55, 2.99;  $p<0.001$ ) as well as for non-musculoskeletal chronic multimorbidity ( $RR_{adj}=2.29$ ; 95% CI 1.70, 3.08;  $p=0.001$ ) than participants without BD. All chronic conditions except asthma and cirrhosis of the liver were significantly more prevalent in participants with BD than in participants without BD. In population with BD, participants with multimorbidity had three to four times higher odds for unfavorable self-reported health outcomes than the participants with no comorbid conditions while the existence of only one comorbidity was not significantly associated with a worse outcome compared to the population with no comorbidities. **Conclusions:** Population suffering from BD has larger prevalence of chronic multimorbidity, than the population without BD and these multimorbidity are associated with unfavorable health outcomes.

## 5438 - Intramedullary nailing as prophylactic measure – Case report

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**Introduction:** Bisphosphonates are an effective therapy for the prevention and treatment of osteoporosis by reducing the incidence of fragility fractures. Atypical femoral fractures (AFF) result from low-energy trauma and can be induced by continuous antiresorptive medication. AFF diagnosis is based on a careful history, physical examination, and imaging. Surgical approach with intramedullary nailing is the first-line treatment for a complete AFF. Prophylactic fixation of an incomplete AFF is still controversial, applied in cases of persistent pain. Conservative management may be considered