

# AB1218-HPR EFFECTIVENESS OF PLATELET-RICH PLASMA ON FUNCTION AND PERFORMANCE IN PATIENTS WITH KNEE OSTEOARTHRITIS: PRELIMINARY RESULTS

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**Background:** Osteoarthritis is one of the most painful conditions and the most frequent cause of functional limitation and disability. There are variety of methods used in osteoarthritis (OA) treatment, including, physical therapy, exercise, intraarticular injections, surgery, etc. Platelet-rich Plasma (PRP) is a relatively new autologous biologic treatment that is used for stimulating cartilage healing process and improving the symptoms. Although the effects of PRP injection on pain and function investigated before, as to our knowledge there are no studies related to performance.

**Objectives:** Aim of this study was to investigate effectiveness of PRP on improving function and performance in patients with knee osteoarthritis.

**Methods:** This study included 28 patients (16 F, 12 M) who were affected by grade 1–3 bilateral knee OA according to Kellgren-Lawrence Scale. Patients received three injections of PRP that were performed at monthly intervals by the same doctor. All patients were evaluated before and six months after the first injection. Primary outcome measures were: Stair Climbing Test (SCT), 50-Foot Walk Test (50 FWT), 30-sec Chair Stand Test (30 CST) and Timed Up and Go Test (TUG), IOWA Score. Additionally, Hospital for Special Surgery Score (HSS) was also recorded as a secondary outcome measure. Wilcoxon signed-rank test is used for interpreting the differences between before and after the injections.

**Results:** All patients completed the study with no adverse effects. The mean age of the patients were 59±7.66 years. Improvements were determined for all outcome measures after 6 months regard to baseline results ( $p<0.01$ ) (Table 1).

Table 1. Comparison of Primary and Secondary Outcomes at Baseline and After 6 months

	Before Median (IQR 25/75)	6 Months After Median (IQR 25/75)	P*
Stair Climbing Test	16 (10.55/19.75)	13.1 (9.25/16.75)	0.001
50-Foot Walk Test	29.5 (27.0/32.45)	27.26 (25.1/30.32)	0.001
30-sec Chair Stand Test	10.5 (9.25/14.0)	12.5 (10.1/15.75)	0.001
Timed Up and Go Test	9.25 (7.25/14.5)	8.1 (6.58/10.15)	0.001
IOWA Score	10.2 (8.92/12.87)	9.9 (8.12/10.75)	0.008
HSS Right	63.5 (55.0/75.0)	75 (66.0/85.0)	0.001
HSS Left	66.5 (55.25/79.25)	78.5 (70.0/85.0)	0.001

Wilcoxon signed-rank test. IQR: Interquartile Range, HSS Right: Hospital for Special Surgery Score of right knee, HSS Left: Hospital for Special Surgery Score of left knee. \* $p<0.05$ .

**Conclusions:** Our preliminary findings show that PRP is safe and effective autologous biologic agent that might improve function and performance in patients with mild to moderate knee OA and; could be considered as a treatment option in patients with knee OA.

**Disclosure of Interest:** None declared

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# AB1219-HPR EXPERIENCES OF SWEDISH "PAIN SCHOOL - COMPETENCE FOR LIFE" OF PATIENTS WITH CHRONIC WIDESPREAD PAIN - A QUALITATIVE INTERVIEW STUDY

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**Background:** Chronic pain is generally associated with low activity level, low work capability, and negative health consequences (1). Education and exercise have shown effective results for patients with chronic pain (2), and is according to EULAR 2016 recommendations first line interventions for patients with fibromyalgia (3). This educational program "Pain school - Competence for life" for patients with chronic pain was developed by the Swedish Rheumatoid Association together with health care professionals for use in primary health care, but is not previously evaluated. The pedagogy is based on a biopsychosocial perspective and self-efficacy with the purpose to provide knowledge, experience and skills within pain, balance of daily living and physical activity. The program comprises four educational group sessions and 10 weeks of physical activity.

**Objectives:** To gather deeper knowledge about how patients with chronic widespread pain experienced participation in the Pain school - Competence for life", with focus on changes in perception of pain and/or lifestyle.

**Methods:** 12 women (age 25–72 years) with chronic widespread pain were included in this qualitative interview study set in primary health care. Informed consent were signed by all participants. Semi-structured individual interviews were held 10 weeks after completion of four educational group sessions. Interviews were conducted by two authors and transcribed verbatim.

**Results:** One theme and four categories were identified. An overarching theme, describing the participants' experiences of the educational program, was a meaningful learning process. It covered four categories: increased understanding of body and mind, new strategies and ways of thinking, experienced value of participation, and preconditions for change. Participants described increased knowledge, awareness and acceptance relating to their symptoms and limitations.

They expressed new strategies relating to managing pain, physical activity, and everyday life. Both individual and social value of participation was described, such as increased well-being, decreased anxiety and improved relationships. Group dynamics, structure of education and former knowledge was described to predispose change in perception of pain and lifestyle.

**Conclusions:** The results provide deeper knowledge about patients' experiences of the educational program Pain School Competence for life. The educational program appears to provide a meaningful and well-functioning structure for education for patients with chronic widespread pain in primary health care. Further, this can contribute to improve education and rehabilitation for patients with CWP provided by physiotherapists and occupational therapists in primary health care.

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# AB1220-HPR THE LEVEL OF ADHERENCE OF RHEUMATOLOGY PATIENTS IN SLOVENIA

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**Background:** Patient adherence is one of the central factors associated with the control of patient's symptoms, good functional ability and longevity. Health care professionals have significant role in their daily practice to improve the adherence to medications.

**Objectives:** We aimed to assess the adherence of patients treated at our secondary/tertiary rheumatology center.

**Methods:** Data were collected in a prospective manner. We investigated the level of self-reported adherence to treatment in 115 consecutive patients (81 women; mean age (SD) of 56.5±14.7 years) with systemic inflammatory diseases in December 2016. We used the 19-item questionnaire-Compliance-Rheumatology (CQR).

**Results:** We found optimal adherence in 52% of patients: the average (SD) adherence rate was 71.1±9.42. We didn't find any significant differences between adherent and nonadherent patients regarding patient age, gender, the diagnosis of rheumatic disease and disease duration time, however, patients with higher education level (at least graduate level) were more compliant than those without any formal education ( $p=0.006$ ). In addition there was no association between adherence and the type of medication (csDMARD, bDMARD) ( $p=0.39$ ). Patient data are presented in the table 1.

Table 1. The adherence according to the patient diagnosis

Diagnosis, n (%)	Disease duration, year	CQR total score, mean (SD)	CQR quartiles, n (%)			
			Least adherent n (%)		Most adherent n (%)	
			<64	64–71,9	71,9–87,9	87,9+
RA 65 (56%)	10,8	69,90 (9,56)	18 (28%)	19 (29%)	28 (43%)	0
PSA 14 (12%)	14,7	74,18 (10,62)	3 (22%)	1 (7%)	10 (71%)	0
AS 14 (12%)	9,7	73,43 (10,73)	2 (14%)	3 (22%)	9 (64%)	0
Other 22 (20%)	12	70,8 1 (11,59)	6 (27%)	3 (13%)	12 (55%)	1 (5%)

**Conclusions:** Our study showed lower adherence rate than expected. To improve patient adherence we should work more in the future on providing additional knowledge and support to patients.

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# AB1221-HPR COMPARISON OF DMARD THERAPIES ON NSAID INTAKE, DISEASE ACTIVITY, FEAR OF MOVEMENT, AND QUALITY OF LIFE IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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**Background:** Ankylosing Spondylitis (AS) may result in loss of mobility and function; therefore, patients can experience pain and stiffness with a loss of physical function in addition to severe impairment in their quality of life. Standard treatment of AS consists of nonsteroidal anti-inflammatory drugs (NSAIDs) and physical therapy.

**Objectives:** The aim of this study was to compare the effectiveness of DMARD therapies on requirements for NSAIDs, disease activity, fear of movement, and quality of life in AS patients.

**Methods:** A total of 74 patients diagnosed according to the modified New York criteria for AS were enrolled. To calculate NSAID intake, the type of NSAID, dose, and percentage of days with intake were recorded in conjunction with DMARD therapy, age, body mass index (BMI), and disease duration. Patients were assessed to measure several parameters: 1) disease activity using the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI); 2) fear of movement as assessed by the Tampa Scale for Kinesiophobia (TSK); and 3) quality of life using the Ankylosing Spondylitis Quality of Life Scale (ASQoL) status from the patient's perspective.

**Results:** Seventy-four patients (36 women, 38 men; mean age: 43.81±10.18 years; mean disease duration: 9.89±8.50 years; BMI: 28.20±5.07) treated with four different DMARDs (Adalimumab+Golimumab [ADA+GO]=17; Infliximab [INF]=19; Etanercept [ETA]=13; Sulphasalazine [ST]=25) were included. NSAID intake was significantly lower in the INF therapy group (mean: 28.1±81.5) compared to the ADA+GO (mean: 33.3±76.0), ETA (mean: 33.5±58.2), and ST therapy groups (mean: 68.1±76.1) ( $p=0.003$ ). BASDAI scores (mean: 3.9±2.4), NSAID intake (mean: 68.1±76.1;  $p=0.003$ ), and AS-QoL scores (mean: 10.2±7.4) were significantly higher in the ST group compared to the other drug groups. TSK scores were also similar between different NSAID intake groups ( $p=0.089$ ).

**Conclusions:** According to our results, ST was not effective enough even with concomitant therapy consisting of a single oral dose of NSAID or standard doses of oral corticosteroids in terms of disease activity, fear of movement, and quality of life in AS patients.

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#### AB1222-HPR EXERGAMES VERSUS SELF-REGULATED EXERCISES WITH INSTRUCTION LEAFLETS TO IMPROVE ADHERENCE IN GERIATRIC REHABILITATION: A RANDOMIZED CONTROLLED TRIAL

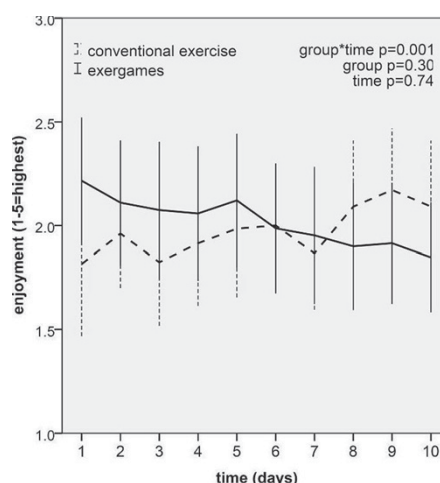
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**Background:** Improving mobility in elderly persons is a primary goal in geriatric rehabilitation (Bachmann 2010). Self-regulated exercises with instruction leaflets are used to increase training volume but adherence is often low. Exergames may improve adherence. This study therefore compared exergames with self-regulated exercise using instruction leaflets.

**Objectives:** To evaluate short-term effects of exergames versus self-regulated exercise using instruction leaflets. Primary outcome was adherence. Secondary outcomes were enjoyment, motivation and balance.

**Methods:** Design: single center parallel group non-blinded randomized controlled trial with central stratified randomization (Hasselman 2015). Setting: center for geriatric inpatient rehabilitation. Included were patients over 65 with mobility restrictions who were able to perform self-regulated exercise. Patients were assigned to self-regulated exercise using a) exergames on Windows Kinect® (exergame group EG) or b) instruction leaflets (conventional group CG). Physical therapists instructed self-regulated exercise to be conducted twice daily during thirty minutes during ten working days. Patients reported adherence (primary outcome), enjoyment and motivation daily. Balance during walking was measured blind with an accelerometer. Analysis was by intention to treat. Repeated measures mixed models and Cohen's d effect sizes (ES, moderate if >0.5, large if >0.8) were used to evaluate between-group effects over time.

**Results:** We evaluated 217 patients and included 54, 26 in the EG and 28 in the CG. Adverse effects were observed in two patients in the EG who stopped because of pain during exercising. Adherence was comparable at day one (38 min. in the EG and 42 min. in the CG) and significantly higher in the CG at



day 10 (54 min. in the CG while decreasing to 28 min. in the EG,  $p=0.007$ , ES 0.94, 0.39–0.151). Benefits favoring the CG were also observed for enjoyment ( $p=0.001$ , ES 0.88, 0.32 – 1.44) and motivation ( $p=0.046$ , ES 0.59, 0.05 – 1.14)). There was no between-group effect in balance during walking.

**Conclusions:** Self-regulated exercise using instruction leaflets is superior to exergames regarding adherence, enjoyment and motivation in a geriatric inpatient rehabilitation setting. Effects were moderate to large. There was no between group difference in balance during walking.

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#### AB1223-HPR BELIEFS AND ATTITUDES OF ITALIAN NURSES TOWARDS PLACEBO AND NOCEBO RESPONSES INDUCED BY CONTEXTUAL FACTORS IN CLINICAL PRACTICE

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**Background:** Placebo and nocebo represent psycho-neuro-immuno-endocrinological responses commonly encountered in nursing care (1,2). A new paradigm proposed the contextual factors (CF) as mediators and moderators of these responses (3). To date, the knowledge about the awareness of CF and their use in nursing is scant.

**Objectives:** The goal of this study was to examine frequency of use, beliefs and attitudes of Italian specialised nurses regarding the contextual factors.

**Methods:** In December 2016, through SurveyMonkey Software®, an online survey was conducted by sending a questionnaire to the members of four Italian Nursing Association, grouping nurses specialized in Neuroscience, Medical, Geriatric and Diabetic care. Behaviours, beliefs and attitudes of nurses about the implementation of CF in clinical practice were assessed by a 17 items questionnaire and resulting data were analysed by descriptive statistic.

**Results:** Of the 1411 members of the involved Nursing Associations invited to participate to the survey 425 responded (30.1%). An high number of respondent nurses adopts CF often in their practice (42%). They believe that CF can positively influence acute pain (47.5%), chronic pain (61%) and rheumatologic disorders (42%). 34% of responders consider the use of CF, if it can determine beneficial psychological effects, as ethically acceptable. 15.5% responders oppose to the adoption of CF when based on deception or if they undermines trust between nurses and patients. A relevant number of nurses (24%) do not communicate the use of CF to their patients and 19% implement CF as addition to other nursing interventions to optimize clinical responses. Nurses explain the power of CF through patient's expectation and psychological mechanism (11%).