

# AB1419-HPR EFFICIENCY OF INDIVIDUAL STEEL ORTHESIS IN HEAVEN SPRAY

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**Background:** The most common cause of heel pain is the heel spur, which is 75% of patients with heel pain. The intensity of the pain does not depend on the size of the spur, as determined on the radiograph. Often sharp in shape and large in size, the spurs are a random X-ray finding. At the same time, severe pains in the heel region are possible with a normal radiograph [1].

**Objectives:** The purpose of this study is to establish the effectiveness of the treatment of patients with pain syndrome in the heel spur, by affecting the main components of the pathogenesis of individually manufactured orthopedic insoles.

**Methods:** During the year, under our supervision there were 156 patients aged from 32 to 67 years. Gender composition - 123 (79%) - women, and 32 (21%) - men. The average time between the onset of clinical symptoms and the first day of treatment was 134 days. The average spur size was 4.3 mm. In 80% of patients, a history of pain lasted for more than 3 months. Patients were divided into 2 groups. The experimental group (G1) used individually manufactured insoles (78 people: 61 - women, 17 - men). The control group (G2) used factory insoles (78 people: 58 - women, 20 - men). 152 patients (98%) completed the protocol: 78 (100%) in G1 and 74 (96%) in G2. The criterion for inclusion in the study was the diagnosis of the heel spur. The diagnosis was made based on anamnesis, ultrasound of the plantar aponeurosis, and radiography of the heel region. The exclusion criteria were patients with heel spurs without heel pain, as well as systemic diseases: rheumatoid arthritis, diabetes mellitus, and severe vascular pathology.

The degree of longitudinal flat-footedness, stability of the foot, individual deformities of the feet were clinically evaluated using clinical and functional methods and the method of vacuum trace modeling [2]. Individual insoles were made based on frame materials in the projection of the arches of the foot. Dense materials maintain a constant tension of the plantar aponeurosis. G1 patients were made full contact insoles with a correction of the transverse arch, without adding relief elements under the heel.

The control group used factory-made insoles from different manufacturers, with soft elements under the heel. Measurement parameters: average pain intensity on a VAS scale; duration of pain throughout the day; distance traveled; subjective comfort when using insoles. The observation period is 12 calendar months.

**Results:** The average VAS score in G1 decreased from 5.4 0.3 at the beginning of the study to 1.01 in 62 patients (81%). 15 patients reported pain reduction, the average VAS score was 2.1 0.3.

Complete relief of G1 pain has been reported in patients with an osteophyte size of less than 5 mm. G1 patients regained their usual movement distance of 3.9 km per day. Cases of recurrence of heel pain is not recorded. No patients experienced discomfort from the use of insoles throughout the entire period of adaptation.

In G2, the average VAS score decreased from 5.6 0.3 at the beginning of the study to 2.9 0.3. Patients of the G2 group were able to increase the distance of movement to 1.2 km per day.

**Conclusion:** When using individual insoles, 93% of patients reported complete relief of pain. 7% of patients noted a significant reduction in pain. The use of individual insoles in the treatment of plantar fasciitis made it possible to reduce pain in a shorter time.

## REFERENCES

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# AB1420-HPR THE USE OF SUBCUTANEOUS METHOTREXATE IN INFLAMMATORY ARTHRITIS: TRANSLATING RESEARCH INTO PRACTICE USING QUALITY IMPROVEMENT METHODOLOGY.

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**Background:** Methotrexate (Mtx) is considered as the drug of choice in the management of inflammatory arthritis (IA). There is growing evidence of the benefit of sub-cutaneous (s/c) methotrexate compared to the oral route. At the same dose,

pharmacokinetic studies showed that s/c Mtx has better bioavailability. RCT studies showed that patients respond better to s/c mtx. Finally s/c Mtx has better tolerability with less risks of GI side effects.

Translating research into practice can be sometimes challenging due to a number of barriers including individual choices and variations as well as systems or organizational factors. Over the recent years there has been great focus on quality improvement in healthcare to make health care "safe, effective, patient centered timely efficient and equitable".

**Objectives:** We aimed that within 6 months period, 100% of our patients with inflammatory arthritis should have trial of s/c methotrexate before starting biologics unless there is contraindication.

**Methods:** We reviewed the data of 50 patients to assess management of patients with IA using our biologic register. We used the 5 why strategy to have better understanding of the lack of prescribing of s/c mtx and variations in clinical practice. By applying improvement science we standardized our pathway, included methotrexate s/c trial prior to biologics. We also conducted a number of interventions including multidisciplinary educational events and one to one meetings, we mobilised and organised our resources in better way to meet our patients needs. We monitored our data over time and reviewed our practice accordingly.

**Results:** Baseline data showed that the majority of our patients had rheumatoid arthritis (RA) (74%) followed by Psoriatic arthritis in 24% of cases. Most patients had initial trial of methotrexate but only 32% were kept on oral methotrexate and 26% of patients had trial of s/c mtx before starting biologics. The main indication of starting s/c Mtx was oral methotrexate induced gastrointestinal side effects. Methotrexate was stopped all together in 34% of patients due to suspected major side effects(SE). SE mainly encountered with oral route with 10% suspected ILD, 14% had deranged LFTs. In order to have better understanding with issues related to the poor use of subcut Mtx the author conducted staff unstructured interviews to explore their experience with s/c Mtx. We also noticed variations between clinicians in their clinical practices.

Our theory of change included a number of interventions and results showed significant improvement in prescribing of s/c Mtx among IA patients. 3 months after starting the projects 1st cycle: 42 patients were switched to sub-cut Mtx with only 6 patients required subsequent biologics use.

There was reduction in the number of patients referred for biologics and among those started on biologics 50% of patients had trial of S/C methotrexate.

**Conclusion:** In summary, our baseline data showed poor use of s/c Mtx in patients with IA despite the growing evidence of its benefit. In order to translate research findings into practice we used 5 whys methodology to have better understanding of the barriers within our systems, we applied QI methodology and standardized our practice for better use of resources at lower cost.

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# AB1421-HPR VIRTUAL CLINICS IN THE PRESENT- A PREDICTOR FOR THE FUTURE?

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**Background:** There is great interest in non face to face (F2F), internet or app based outpatient interact at the moment. As these become established, we look at the non F2F appointments already happening in telephone and virtual clinics in a busy urban rheumatology department. Here we look at the type of diagnoses dealt with in a non F2F environment and potential outcomes from these non F2F appointments.

**Objectives:** To assess the efficiency and utilisation of virtual and telephone clinics in a general rheumatology department.

**Methods:** Data was collected from electronic (Cerner) patient records on 240 patients who had a virtual appointment in May 2018. The data was analysed using Excel 2010.

**Results:** 240 patients had virtual appointments in one month. 121 (50.4%) were via telephone and 119 (49.6%) via patient letter. 34 (14.1%) patients had multiple virtual/telephone appointments. 129 (54%) were carried out by consultants, 78 (32%) by nurses and 33 (14%) by registrars. 37% had rheumatoid arthritis. 32 (13%) appointments lead to a prescription. Virtual appointments produced 44 referrals, including 18 to another specialty, 16 to physiotherapy, and the rest to hand therapy or podiatry. Most patients had a F2F appointment before and after their virtual appointment in May 2018, 1 patient had died before having a second face to face appointment and 13 (5%) were discharged from their virtual appointment.

	Mean Number of Days between appointments
From 1 <sup>st</sup> Face to Face to Virtual Appointment	44
From Virtual Appointment to 2 <sup>nd</sup> Face to Face	53
From 1 <sup>st</sup> Face to Face to 2 <sup>nd</sup> Face to Face	94

**Abstract AB1421HPR Table 1.** The mean number of days between each type of appointment.

**Conclusion:** Consultants undertook the bulk of virtual clinics, and these appointments resulted in the majority of referrals and prescriptions. Virtual appointments reduce the waiting times for contact with a healthcare professional between appointments. Many patients had several virtual appointments between face to face appointments and this cohort may benefit from more scrutiny. Current technology already improves communication and leads to significant changes in patient care without requiring F2F appointments. Internet based and app based interaction should face the same scrutiny.

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#### AB1422-HPR MODERATE AND HIGH ADHERENCE TO A DISEASE MANAGEMENT MODEL IN PATIENTS WITH RHEUMATOID ARTHRITIS IMPROVES CLINICAL RESULTS IN A BIG UNICENTRIC COHORT

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**Background:** Rheumatoid arthritis (RA) is an inflammatory, chronic disease of unknown etiology. Usually it leads to deformity and destruction of joints through the erosion of cartilage and bone. Over 90% of patients with RA report to suffer symptoms in hands and joints, swelling, loss of motion, muscle weakness among others. These symptoms affect all aspects in a patients life. Therefore, management of a patient with RA should not only include evaluate outcomes related to the rheumatology specialty, on the contrary, aspects such as physical disability, nutrition, mental health, among others should be taken into account. Centers of excellence in rheumatoid arthritis have proposed a multidisciplinary model of care with an initial diagnosis, treatment prescription and follow-up with a rheumatologist, periodic consultations with a psychiatrist, psychologist, physiotherapist, occupational therapy nutrition, and, a patient focused program. With a multidisciplinary model of care the patient is seen as a whole, and the expectation is to achieve the best results in the management of RA.

**Objectives:** The aim of this research was to define adherence/attendance to a multidisciplinary model of care for patients with RA that attend to a RA specialized center in Colombia.

**Methods:** We implemented the center of excellence model program proposed by REAL-PANLAR group in 2015 (3). In order to define adherence to the multiapproach model the authors performed an informal expert consensus to propose a method to measure adherence to the model. The authors proposed three levels of adherence. We proposed three levels of adherence as follows: **High adherence:** For rheumatology patients had to attend between 6 and 12 consultations in one year. For physical therapy, psychiatry, psychology, occupational therapy and

nutrition patients had to attend to 3 or more consultations during one year per each specialty. **Moderate adherence:** For rheumatology patients had to attend between 3 and 5 consultations in one year. For physical therapy, psychiatry, psychology, occupational therapy and nutrition patients had to attend between 2 or 4 consultations during one year per each specialty. **Low adherence:** For rheumatology patients had to attend between 1 and 2 consultations. For physical therapy, psychiatry, psychology, occupational therapy and nutrition patients achieved only 1 consultation or less during one year per each specialty. We performed a descriptive analysis and compared the level of adherence and disease activity.

**Results:** During 2018 we reviewed the medical charts of 6851 patients diagnosed with rheumatoid arthritis; 82% were female and 18% were male. Mean age was 59 years 13 years old. Regarding disease activity mean DAS28 was 2.69 0.84. Most of patients that were considered as Moderate or High adherent achieve remission or LDA.

See table 1. Levels of Adherence in Patients with RA

DAS	LOW ADH		MODER ADH		HIGH ADH	
	n	%	n	%	n	%
REMISION	245	4%	2090	31%	1495	22%
LDA	121	2%	874	13%	589	9%
MDA	193	3%	699	10%	465	7%
SDA	27	0.4%	31	0.5%	22	0%

**Conclusion:** This is an initial approach in order to evaluate patients adherence and attendance to a new implemented multidisciplinary disease management model of attention for patients with RA in Colombia. Our descriptive study demonstrated that patients with moderate or high adherence can achieve better clinical outcomes compared to those who arent adherent to the model.

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#### AB1423-HPR ELICITING THE AGENDA OF PATIENTS WITH MUSCULOSKELETAL DISORDERS; THE PHYSIOTHERAPIST-PATIENT INTERACTION

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**Background:** Eliciting main concerns via interviewing is important for patient-centered care and for planning individualized rehabilitation program (1, 2). Recently, it has been shown that clinicians often fail to elicit the patients agenda and, when they do, they interrupt the patients discourse (3). However, the prevalence of agenda setting in physiotherapist as a health care provider and the physiotherapist-patient interaction remains relatively unexplored.

**Objectives:** The aim of this study was to describe agenda elicitation in rehabilitation, to determine the frequency of encounters in which physiotherapists elicited the patients with musculoskeletal disorders agenda, the proportion and timing of interrupted answers.

**Methods:** An audio-recording analysis of 52 clinical encounters recorded during first physiotherapist-patient interaction were performed. The elicitation of the patient agenda characteristics as the time to interruption or to complete statement were analyzed.

**Results:** Physiotherapists elicited the patients agenda in all (96.1%) clinical encounters. Interestingly, in those encounters in which physiotherapists elicited patient concerns, the clinician interrupted the patient after a median of 15 seconds (interquartile range 6 to 22 seconds). In the uninterrupted encounters in which physiotherapists elicited patient concerns, the patients with musculoskeletal disorders was state their agenda in 2414.5 seconds.

**Conclusion:** Physiotherapist emphasize to elicit the patients agenda, however, they interrupt expression very sooner. Eventually, the failure to elicit the patients agenda inhibits the physiotherapists-patient communication and this would lead to failure to plan rehabilitation program based on the needs of each patient.

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