patients who were intraarticular introduced HA with HS. The course of IA injections was 2 for LMW, HMW, and HA with HS, and 3 for MMW HA. Injections were performed with an interval of 1 week. To evaluate the results of treatment, we studied the intensity of pain according to VAS and the total score of KOOS before treatment and on follow-up examinations 1, 3 and 6 months after the course of IA HA injections.

Results: the maximum reduction in pain with IA HA injections at stage I of knee OA occurred by 3 months after the course of treatment. Moreover, improvement was detected by 1 month in 84.3% of cases, and remained until the end of the study in 71.1% of patients. All HA preparations used in stage I of knee OA were effective. At stage II of the knee OA after 3 months after the course of IA HA, different efficiencies of HA preparations were revealed. So, in the groups of LMW, MMW and HA with HS, the improvement persisted up to 3 months, and in the group of HMW HA - up to 1 month. After 3 months, the best results were shown by HA with HS, by 6 months the results were comparable. IA HA injections at the II stage of knee OA led to good and excellent results 1 month after the course of treatment in 53.9% of cases, but by the end of the study, improvement remained in only 30.8% of patients. In the case of the use of HA in stage III of the knee OA, the effectiveness of the studied drugs was comparable, and the maximum improvement was achieved by 1 month. The positive effect of IA HA injections in patients with stage III of the knee OA one month after the course of treatment was obtained in 40.6% of cases, by 3 months it decreased to 18.8%, and by 6 months - to 15.7% of patients.

Conclusion: IA injections of HA at stage I of the knee OA is a highly effective method of conservative treatment, which allows to relieve pain and improve the condition of the knee joint for a period of 6 months or more. The use of HA preparations at stage II of the knee OA allows reducing pain up to 3 months with IA injections of LMW and MMW HA, as well as HA with HS. HMW HA helps reduce pain intensity for a period of 1 month. The use of HA preparations in stage III of the knee OA leads to a short-term relief of symptoms of OA.

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AB0586

PREVALENCE OF EARLY SYMPTOMATIC KNEE OSTEOARTHRITIS ACCORDING TO THREE CLINICAL CLASSIFICATION CRITERIA

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Background: Knee osteoarthritis (KOA) is a heterogeneous disease. Different classification criteria for symptomatic KOA (SKOA) have been proposed. Determining the prevalence and comparing the different criteria of SKOA in patients with knee pain will serve as a base when studying the predictive ability of these criteria in a longer perspective.

Objectives: To study the prevalence of SKOA in individuals with knee pain according to three different classification criteria: the American College of Rheumatology (ACR), (1), the European League Against Rheumatism (EULAR)(2), and the National Institute for Health and Care Excellence (NICE) (3).

Methods: Baseline data from an ongoing longitudinal study (HALLOA) including 296 individuals with knee pain, recruited by advertisement, were analysed. The individuals were categorized according to the classification criteria of SKOA (ACR, EULAR and NICE) based on age, clinical examination (crepitation), and self-reported data from KOOS (pain, symptoms, ADL, and sport/recreation), and dichotomized as fulfilling the criteria (SKOA) or not (no SKOA). BMI was measured (kg/m²). Radiographic KOA (RKO) was assessed according to Ahlback criteria (1-5), defined as RKO with grade 1 or more in at least one knee. Prevalence was calculated (frequencies, %) for each criterion, and Chi-Square test or the Independent-Samples t-test were used for comparisons between individuals fulfilling SKOA or not.

Results: The mean age was 52 (min-max 24-73) years, 70% were women and 22% were classified with RKO. The prevalence of SKOA according to each criterion was 57% (ACR), 51% (EULAR) and 73% (NICE) respectively. In total, 48% had SKOA according to all three criteria and whereof 32% had RKO, compared to 10% RKO among individuals with no SKOA. Regardless of the criterion, significantly more individuals classified with SKOA also had RKO compared to

individuals with no SKOA, $p < 0.001$. Those classified as SKOA were significantly older and had higher BMI compared with no SKOA (Table 1).

Conclusion: Approximately 50-70% of the individuals with knee pain were classified as having SKOA, where EULAR criteria had the lowest prevalence. A better understanding of early knee pain classification according to different clinical criteria is essential for the ability to capture and follow the long-term prognosis of early SKOA. Further longitudinal studies are needed.

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Table 1. Comparisons between the ACR, EULAR and NICE criteria of symptomatic knee osteoarthritis, stratified for symptomatic knee osteoarthritis or not

	ACR			EULAR			NICE		
	Total	OA	No OA	P-value	OA	No OA	P-value	OA	No OA
N (%)	296 (100)	170 (57.4)	98 (33.1)		152 (51.4)	114 (38.5)		215 (72.6)	58 (19.6)
Age (Y), Mean (SD)	51.6 (8.7)	53.3 (7.0)	49.0 (10.3)	<0.001	54.5 (5.1)	48.1 (10.8)	<0.001	54.7 (4.9)	40.5 (9.8)
Gender, female (%)	208 (70.3)	121 (71.2)	66 (67.3)	0.511	108 (58.4)	77 (67.5)	0.538	154 (71.6)	36 (62.1)
BMI (kg/m ²), Mean (SD)	26.4 (4.6)	26.5 (4.5)	25.8 (4.3)	0.179	26.9 (4.5)	25.4 (4.2)	0.005	26.7 (4.5)	24.8 (3.8)
RKO, n (%)	64 (21.6)	45 (26.5)	12 (12.2)	0.003	47 (30.9)	10 (8.7)	<0.001	58 (27.0)	1 (1.7)

Independent-samples t-test and Chi-2-test. **Bold**=Significant correlation ($p \leq 0.05$). **OA** = Osteoarthritis. **ACR** = American College of Rheumatology. **EULAR** = the European League Against Rheumatism. **NICE** = the National Institute of Care and Excellence. **BMI** = Body Mass Index. **RKO** = Radiographic Knee Osteoarthritis (Ahlback, with grade ≥ 1 in ≥ 1 knee).

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AB0587

ASSESSING THE CHARACTERISTICS AND MANAGEMENT OF KNEE OSTEOARTHRITIS PATIENTS WITH HYPERTENSION BY CLINICIAN SPECIALITY

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Background: Though the pathogenesis of knee osteoarthritis (OA) is complex, patients with OA frequently have other comorbidities, including hypertension, which eludes to other considerations needed when deciding appropriate treatment management.

Objectives: This study aims to examine the profiles of knee OA patients with hypertension vs. those without any comorbidities, and to elucidate key differences between these patient groups as potential areas of consideration.

Methods: A multi-center, online medical chart review study of patients with OA was conducted between May – July 2020 among US rheumatologists (rheums), orthopedic surgeons (orthos), primary care physicians with a focus in sports medicine (SM PCPs), and pain specialists. Physicians recruited were screened for duration of practice in their specialty (3-50 years) and caseload (≥ 35 knee OA patients personally managed, at least 10 being moderate-severe). Patient charts were recorded for the next 5 eligible patients seen during the screening period. Respondents abstracted patient demographics and treatments used. Descriptive statistics were used to analyse the data.

Results: 260 physicians were recruited and collectively reported 796 knee OA patients; 559 were reported to experience hypertension whilst 237 were reported as not experiencing any comorbidities.

Reported hypertension patients were significantly older (mean 67 vs 59 years old, respectively; $p \leq 0.01$) and weighed more (mean 82kg vs 77kg, respectively; $p \leq 0.01$) than patients without comorbidities; they were also significantly more likely to be previous smokers compared to those without comorbidities (23% vs 8%, respectively; $p \leq 0.01$). With regards to current knee OA severity, both orthos and SM PCPs reported a significantly higher proportion of hypertension patients that were deemed 'severe' (physician opinion) vs patients without comorbidities (orthos: 50% vs 32%, respectively; SM PCPs: 42% vs 23%, respectively; $p \leq 0.01$). Rheums and pain specialists reported greater mild opioid usage amongst hypertension patients compared to those without comorbidities (rheums: 28% vs 10%, respectively ($p \leq 0.05$); pain specialists: 40% vs 9%, respectively; ($p \leq 0.01$)); orthos and SM PCPs stated significantly greater use of corticosteroid injections amongst their reported hypertension patients vs those without comorbidities (orthos: 60% vs 41%, respectively; SM PCPs: 40% vs 19%, respectively; $p \leq 0.01$). Hypertension patients reported by orthos and SM PCPs are more likely to be

considered for total knee replacement (TKR) surgery compared to those without comorbidities (orthos: 59% vs 32%, respectively; SM PCPs: 37% vs 19%, respectively; $p \leq 0.01$). Conversely, hypertension patients reported by rheums are less likely to be considered for TKR vs those without comorbidities (41% vs 18%, respectively; $p \leq 0.05$).

Reported hypertension patients had a significantly higher mean Visual Analogue Scale for Pain (VAS) score than patients without comorbidities (6.6 vs 5.9, respectively; $p \leq 0.01$). A significantly higher proportion of patients with hypertension demonstrate radiographic evidence of bone erosion compared to those without comorbidities (69% vs 56%, respectively; $p \leq 0.01$).

Conclusion: From the sample surveyed, knee OA patients with hypertension may require a more specific and holistic treatment approach that takes into account their CV status and managing physician specialty. Further investigation using comparator cohort is warranted.

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- [1] Ipsos Osteoarthritis Therapy Monitor (May – July 2020, 260 specialists reporting on 769 knee OA patients seen in consultation, data collected online. Participating physicians were primary treaters and saw a minimum number of 35 knee OA patients). Data © Ipsos 2021, all rights reserved.
- [2] Ipsos Osteoarthritis Therapy Monitor (May – July 2020, 260 specialists reporting on 769 knee OA patients seen in consultation, data collected online. Participating physicians were primary treaters and saw a minimum number of 35 knee OA patients). Data © Ipsos 2021, all rights reserved.

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AB0588

“ESORT” ITALIAN SOCIETY OF RHEUMATOLOGY (SIR) REGISTER ON OSTEOARTHRITIS (OA): PRELIMINARY DATA

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Background: In Italy Osteoarthritis (OA) is a widespread and disabling disease that affects an increasingly large number of patients in the population, representing one of the main causes of morbidity and disability with high socio-economic costs. The etiology of OA is multifactorial, even if the significant association with some modifiable risk factors like mechanical overload and obesity is now well demonstrated. Early diagnosis and treatment strategies in OA could reduce both patient morbidity and associated costs.

Objectives: Promoted by the Italian Society of Rheumatology (SIR), The Early Symptomatic Osteoarthritis (ESORT) registry has the aim to study the natural history of OA from the earliest stages (pre-radiographic) considering risk factors in the progression of the disease, and the influence of therapeutic factors on long-term disease outcomes. The ESORT register aims to describe the socio-demographic and clinical characteristics of patients affected by OA in Italy; evaluates the extent of symptoms, functional damage, comorbidities, the frequency of use of drugs currently indicated in our country, and differences related to clinical subsets according with comorbidities and geographical localization of the patient.

Methods: Actually 8 Italian Rheumatology centers are involved in the online data entry data of the SIR registry (developed and validated by SIR Study Center), considering patients affected by OA. In particular, the electronic database collects information about main demographic variables, significant anamnestic elements (risk factors and comorbidities), localization of OA, laboratory data, clinimetric indices with WOMAC / FHOA / VAS scales, radiographic instrumental data and therapy in act. These data are reported in specific forms in the register with annual reassessment.

Results: Currently, 318 patients with OA are included in the “ESORT” registry with an extension of observation up to 48 months, 214 women and 104 men with an average age of 71 years and an average weight of 72 kg. About 14% of patients affected by knee OA show Kellgren and Lawrence radiological stage 0 in presence of painful symptoms at the knees. The most frequent localization of

OA is the knee (63%), followed by the hip (41%), hand (36%), spine (34%), and other sites (16%). The Table 1 shows details of some parameters (average age, average weight, intake of NSAIDs, intake of opioids and intake of chondroprotectors) according to the localization of the disease. From the registry data, patients with OA results treated mainly with NSAIDs and chondroprotectors, and patients with knee OA are the most frequently treated with opioid analgesics (44%), less used in other OA locations.

Conclusion: The “ESORT” register is a useful tool for epidemiological and clinical information relating to patients with OA and for monitoring the evolution of the disease and the response to therapy.

	Average age (years)	Average weight (kg)	Intake of NSAIDs (% of patients)	Intake of opioids (% of patients)	Intake of chondroprotectors (% of patients)
OA hand	70	67	74%	10%	25-31%
OA knee	74	75	85%	44%	53-59%
OA hip	69	70	75%	25%	24-28%
OA spine	75	75	76%	14%	19-28%
OA other localization	74	73	69%	13%	15-35%

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AB0589

STUDY OF THE EFFECTIVENESS OF PELOID THERAPY IN THE TREATMENT OF OSTEOARTHRITIS OF THE KNEE JOINTS IN THE CONDITIONS OF THE SANATORIUM “CHUVASHYAKURORT”

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Background: Peloids are successfully used in the treatment of various diseases. The sapropel mud-silt deposits of freshwater reservoirs are the most widely used for joint diseases. The sapropel mud from the freshwater lake “Kogoyar”