CTD subtype was not specified in 2,067. CTD-PAH patients had a mean age of 55 years and 87% were female. Most patients (70%) had functional class III or IV disease and the mean 6-minute walk distance at enrollment was 327 m. Among registries that enrolled patients of all PAH etiologies (N=7,829), survival rates in the CTD-PAH subpopulation (n=2113), were 83%, 73%, and 62% at 1-, 2-, and 3- years, respectively. These survival rates were lower than those reported for the overall PAH population: 88%, 79%, and 72% at 1-, 2-, and 3- years, respectively. Numerically higher survival rates at 1-, 2-, and 3- years were observed in CTD-PAH patients treated in 2010 and later: 85% vs 90%, 74% vs 82%, and 65% vs 73%. Among all CTD-PAH patients, survival rates were lower for patients with SSc compared to those with SLE: 88% vs 92%, 75% vs 82%, 67% vs 87% at 1-, 2-, and 3- years, respectively (Figure).

Conclusion: Patients with CTD-PAH have a substantial risk of death, however, CTD-PAH patients treated within the last ten years have numerically higher survival rates than those treated earlier. This may be related to increased screening for PAH, especially in SSc (leading to earlier diagnosis) and/or the availability of new treatment approaches. Consistent with clinical observations, patients with SSc have worse survival rates than those with SLE. Given the high risk of mortality in these patients, early detection and upfront aggressive treatment are warranted.

References:

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FRI0540

DIFFERENT ASSOCIATION BETWEEN BONE MINERAL DENSITY AND OSTEOARTHRITIS ACCORDING TO THE SITE OF OSTEOARTHRITIS

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Background: Osteoarthritis (OA) and osteoporosis (OP) are both high prevalence at old age, and there are various reports on the association between the two diseases. Some studies have shown that high bone mineral density (BMD) is a risk factor for OA incidence, while others have mentioned the possibility of OP contributing to onset of hip OA. Recent study described that higher BMD reduce the risk of hip OA and raise the risk of knee OA. So, the relationship between BMD and OA or the effects of BMD on different OA site are not clear yet.

Objectives: In this study, we investigated the association between BMD and radiographic OA using representative sample data of Korean adults.

Methods: The study included 6345 subjects aged 50 years or older who underwent BMD measurements using dual-energy X-ray absorptiometry and X-rays of at least one site of the spine, hip, and knee in the Korean National Health and Nutrition Examination Survey conducted in 2010-2011. OA was defined according to radiographic finding (KL grade ≥ 2). Weighted multivariable logistic regression was used to analyze the association between BMD and OA. Since gender differences are evident, men and women were analyzed separately.

Results: Spine OA was about 60% in both men and women, and hip OA was about 35% in men but only 1% in women. Knee OA was 76% in women and 58% in men. In men, the risk of OA increased 1.24 times as BMD increased by 1 g/cm². By site, knee and spine OA were statistically significant in relation to BMD, but hip OA was not statistically significant. In women, the association between BMD and knee and hip OA was insignificant. In spine OA, the risk of OA increased 1.2 times when BMD increased by 1 g/cm².

Conclusion: In conclusion, high BMD increased the risk of knee and spine OA in men, but did not affect hip OA. In women, high BMD increased the risk of spine OA. Differences in the mechanism of OA development by site are thought to be possible explanations for the differences in the association between BMD and OA.

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FRI0541

TEN-YEAR OUTCOME OF DIFFERENT SUBTYPES OF UNDIFFERENTIATED INFLAMMATORY ARTHRITIS

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Background: A group of patients with recent onset of arthritis always presents a certain difficulty for the practitioner due to its marked heterogeneity. This especially concerns the patients with undifferentiated inflammatory arthritis (UIA).

Objectives: To characterize the long-term nosological outcome of clinical and immunological subtypes of early UIA.

Methods: A cohort study of patients with recent onset of arthritis with a duration of not more than 12 months (n = 761, 82.8% females, 55.2% RF +) was initiated in 2003. All patients were referred to rheumatologist from GP with suspicion on inflammatory arthritis. Inclusion criteria: age 18 years or more, at least 1 swollen joint at 1st visit and/or positive squeeze test or morning stiffness for at least 30 minutes. 243 patients were initially classified as having UIA: 46 (18.9%) males, 197 (81.1%) females, age (median, quartiles)- 44 [29;53] years, duration of symptoms- 3 [2;5] months, swollen joints count (66/68)- 2 [1;4], tender joints count 3 [2;6], 85 (35%) rheumatoid factor (RF)+, 63 (25.9%) anti-CCP+. Patients with UIA were followed up for at least 10 years.

Results: 28 (11.5%) of patients were lost to follow up. Long-term observation was conducted in 215 patients. 22 (10.2%) of them developed persistent spontaneous (without use of DMARDs) remission. Other patients were finally classified as having: rheumatoid arthritis (RA) 138 (64.2%) and non-RA (25.6%). The spectrum of diagnoses in non-RA group included: ankylosing spondylitis, osteoarthritis, gout, psoriatic arthritis, polymyalgia rheumatica, systemic lupus, mixed connective tissue disease, sarcoidosis, paraneoplastic syndromes. The following characteristics at baseline positively correlated with the development of RA: arthritis of 3 or more joints (p=0.011), arthritis of hand (p=0.005), high ESR (p<0.001), high CRP (p=0.003), PF-positivity (p<0.001), anti-CCP-positivity

Table. Outcome of different subtypes of patients with UA after 10 years of follow up (n=215).

Subtypes of UA	Outcome			P (Pearson chi-squared test)
	Non-RA (n=55)	RA (n=138)	Spontaneous remission (n=22)	
Mono- and oligo arthritis (n=140)	40 (28.6%)	81 (57.9%)	19 (13.6%)	0,016
Polyarthritis (n=75)	15 (20%)	57 (76%)	3 (4%)	
RF-negative AND anti-CCP-negative (n=90)	34 (37.8%)	41 (45.6%)	15 (16.7%)	
RF+ OR anti-CCP+ OR low levels (<3 ULN) (n=92)	20 (21.7%)	65 (70.7%)	7 (7.6%)	<0,001
High RF+ AND High anti-CCP+ (n=33)	1 (3%)	32 (97%)	0	