in women (-0.82% [95% CI 0.9992-0.9944] (p < 0.001). The distribution by CCAA of the incidence and trend is represented in the following figure:

In the analysis of risk factors/markers that explain this distribution, we found significant correlations with genetic factors (H and J2 haplotypes), demographic (birth, fecundity, mean age and aging index), climatic factors (precipitation) and the time a region was on the Republican side. The linear regression model that includes the factors that show significant correlation justifies 96% of the variability observed.

Conclusion: In Spain, the rate adjusted for age of incidence of hip fracture is decreasing. There is a great variability in the incidence and tendency of hip fracture among different CCAA. Genetic, demographic, climatological factors and due to the cohort effect of the civil war, explain 96% of this variability.

Disclosure of Interests: None declared


SAT0621

IMPACT OF HINDFOOT CORONAL/SAGITTAL ALIGNMENT ON METATARSUS PRIMUS ELEVATUS IN RHEUMATOID FOOT DEFORMITIES

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Background: Typical foot deformity patterns of patients with rheumatoid arthritis (RA) include hallux valgus, claw toes, splay foot, flat foot, and hindfoot valgus deformities. However, some patients show deformities different from a typical pattern, including metatarsus primus elevatus, described as dorsal elevation of the first metatarsal in relation to the lesser metatarsals, as we reported previously. In the report, we speculated that metatarsus primus elevatus might be associated with calcaneal inclination and hindfoot varus alignment. However, there are no studies on the association of hindfoot alignment with metatarsus primus elevatus in patients with RA.

Objectives: To elucidate the impact of hindfoot coronal/sagittal alignment on metatarsus primus elevatus in patients with RA

Methods: A retrospective study was performed of standing anteroposterior and lateral radiographs of 81 feet in 53 patients who underwent surgical treatment for metatarsalgia in our hospital. The distance between the dorsal cortical bones of the first and second metatarsals (MPE) was measured on the lateral radiographic image where lines along the calcaneus tuberosity were defined as X and Y axes, ten anatomic points of the foot were measured. Calcaneal pitch, talar declination angle, and naviculocuboid (N/C) overlap ratio were measured for assessment of hindfoot sagittal and coronal alignment, respectively. We assessed the hallux valgus angle (HVA), the intermetatarsal angle between first and 2nd metatarsals (M1M2A), and the intermetatarsal angle between first and 5th metatarsals (M1M5A) for axial foot alignment. The correlations of MPE with other radiographic angular and coordinate data were statistically assessed using Spearman rank correlation coefficient.

Results: Median MPE was 1.7 mm (interquartile range: 0–5.2 mm). The first metatarsal head, first metatarsal-cuneiform and posterior talocalcaneal joint were shifted dorsally (r=0.70, p<0.01; r=0.57, p<0.01; r=0.42, p<0.01, respectively). No correlation MPE with HVA and M1M5A were observed (r=0.26, p=0.05; r=0.25, p=0.07, respectively), however, M1M2A showed correlation with MPE (r=0.52, p<0.01). On the other hand, MPE showed a high degree of correlation with talar declination angle, calcaneal pitch, and N/C overlap ratio (r=0.45, p<0.01; r=0.35, p<0.01; r=0.45, p<0.01, respectively).

Conclusion: In patients with RA, the hindfoot joints shifted dorsally in metatarsus primus elevatus. Moreover, hindfoot varus alignment and high-arched foot affect metatarsus primus elevatus. The results of the present study suggest the importance of evaluating hindfoot alignment when determining surgical treatment procedures for rheumatoid foot deformities.

Disclosure of Interests: None declared


SAT0622

ROLE OF PREGNANCY IN FLARE AND PROGRESSION INTO DEFINED RHEUMATIC DISEASE IN WOMEN WITH UNDIFFERENTIATED CONNECTIVE TISSUE DISEASE: RESULTS FROM A MONOCENTRIC OBSERVATIONAL COHORT

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Background: Patients with Undifferentiated Connective Tissue Disease (UCTD) are at risk of disease worsening and progression into well-defined rheumatic disease over time1. Only a few studies2-3 from small cohorts regarding the role of pregnancy in UCTD outcome are available, with no clear-cut factors associated with the evolution of the disease.

Objectives: To evaluate the impact of pregnancy on progression from UCTD into a well-defined rheumatic disease. To analyze the role of UCTD flares during pregnancy, as well as clinical and laboratory features in the evolution of the disease; to compare UCTD evolution in patients with or without pregnancy; to compare UCTD evolution in patients with or without UCTD diagnosis before pregnancy.

Methods: We collected clinical data from a rheumatologist outpatient clinic regarding women (aged 18-45) with UCTD, from diagnosis to last follow-up. Pregnant women with a previously undiagnosed UCTD were included using a validated two-steps screening method performed at the 1st trimester during the gynecological ultrasound evaluation, as previously reported4. We compared women with at least one pregnancy to non-pregnant women. Student’s t test was applied for unpaired, continuous variables, while chi-square to compare percentages. The rate of progression was compared with Kaplan–Meier estimator and Log-rank test. A Cox regression model was fit to assess the association of flare during pregnancy and of clinical and laboratory features with the evolution of the disease.

Results: We retrieved data regarding 152 pregnant and 108 non-pregnant women, mean age of 32 (+6.71) years. We recorded 201 pregnancies. The progression into well-defined disease was observed in 31 (20.4%) pregnant patients and in 5 (4.6%) non-pregnant patients (p=0.001) (fig.1). The most frequent evolution was into SLE (52%) in pregnant UCTD and into SSc (40%) in non-pregnant patients. We observed 32 flares during pregnancy, mostly with joints involvement (75% of the cases). Having at least one flare during pregnancy, a history of UCTD-related cytopenia and lower levels of C4 in the 6 months before conception were associated with disease evolution. No differences were found as for disease evolution in pregnant patients with or without a previous UCTD diagnosis.

Conclusion: The rate of progression from UCTD into a well-defined rheumatic disease is significantly higher in women who had a pregnancy. Having a history of UCTD-related cytopenia, or lower C4 levels before conception, or at least one flare of UCTD during pregnancy significantly increases the risk of progression. The timing of the diagnosis of UCTD, in respect with the pregnancy, does not change the risk of flare and progression.

REFERENCES

Figure 1. Persistence of UCTD in women with at least one pregnancy compared to non-pregnant women (Kaplan-Meier curve)