CONCLUSIONS: Among women at risk of RA, breastfeeding was not associated with the presence of ACPR or antiCarp. Our results do not support a protective role of breastfeeding in the development of systemic autoimmune associated with RA.

REFERENCES:

Disclosure of Interest: None declared


SAT0694 DETERMINANTS OF TRAJECTORIES OF MULTI-SITE PAIN IN KNEE OSTEOARTHRITIS: A 10.7-YEAR PROSPECTIVE STUDY IN OLDER ADULTS

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Background: Pain in osteoarthritis (OA) is very common especially in elderly and commonly occurs at multiple sites. Multi-site pain (MSP) has been shown to be associated with more severe symptoms and worse health-related quality of life compared to single-site pain. Limited evidence exists about understanding the course of MSP and its determinants.

Objectives: To identify distinct trajectories of MSP over 10.7 years in an older population, and to examine risk factors for identified trajectories.

Methods: 1099 participants (mean age 63 years) from the population-based Tasmanian Older Adult Cohort study were recruited at baseline. 875, 768 and 563 participants attended years 2.6, 5.1 and 10.7 follow-up, respectively. Demographic, psychological, lifestyle and comorbidities data were obtained at baseline. Knee radiographic OA was assessed by X-ray at baseline. Group-based trajectory modelling was applied to identify distinct trajectories of MSP. Multi-nominal logistic regression was used for the analyses with adjustment for potential confounders.

Results: Three distinct MSP trajectories were identified: a group of participants with no MSP (11%), a group with ‘fluctuating MSP’ (38%), and a group with ‘persistent MSP’ over time (51%). In multivariable analyses with the ‘no MSP’ trajectory as reference, emotional problems and comorbidity were significantly associated with both ‘fluctuating MSP’ and ‘persistent MSP’ trajectories. In addition, female sex, being obese and radiographic knee OA predicted the trajectory of ‘persistent MSP’ in the whole population. Results were similar with emotional problems (relative risk [RR]: 2.57 for ‘fluctuating MSP’ and 5.70 for ‘persistent MSP’, both p<0.05), being obese (RR: 3.80 for ‘persistent MSP’, p=0.007) and comorbidity (RR: 2.45, p=0.010) in either ‘fluctuating MSP’ or ‘persistent MSP’ trajectory in those with radiographic knee OA.

Conclusions: MSP trajectories appear stable once established and can be predicted by factors both peripheral and central in origin.

Disclosure of Interest: None declared

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SAT0695 HOSPITALISATION RATES AMONG PATIENTS WITH PRIMARY SJÖGREN’S SYNDROME: A POPULATION-BASED STUDY, 1995–2016

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Objectives: To determine rates and primary discharge diagnoses of hospitalisation in a cohort of patients with incident primary Sjögren’s syndrome (pSS) compared to the general population.

Methods: This was a retrospective population-based cohort study focused on Olmsted County, Minnesota. The pSS cohort consisted of patients with incident pSS in the 1970–2015 period and was compared with a cohort of individuals without pSS matched 3:1 for age, sex and calendar year, randomly selected from the same population. Hospitalisations in 1995–2016 were examined. Discharge diagnoses were categorised using the Clinical Classifications Software for ICD-9-CM.

Results: A total of 385 hospitalisations occurred in the 160 patients with pSS during 1592 person-years of follow-up. Among 466 comparators, there were 899 hospitalisations during 4660 person-years of follow-up, resulting in a significantly higher rate of hospitalisations in patients with pSS (rate ratio [RR]: 1.25, 95% CI: 1.11–1.41). Rates of hospitalisation were increased among patients with pSS for endocrine, nutritional and metabolic diseases and immunity disorders.
ASSOCIATIONS BETWEEN ANTIBIOTICS FOR NON-TUBERCULOUS MYCOBACTERIAL INFECTION AND INCIDENT SJÖGREN’S SYNDROME: A NATIONWIDE, POPULATION-BASED CASE-CONTROL STUDY

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Background: We recently reported an association between Sjögren’s syndrome (SS) and prior nontuberculous mycobacterial (NTM) infection which was defined as having a diagnosis of NTM with concurrent combinational antibiotics therapy for NTM infection. However, whether the increased risk of SS was attributed to NTM infection or antibiotics used to treat NTM infection was unknown.

Objectives: To address the association between use of antibiotics which can be used to treat NTM infection and the risk of newly diagnosed SS.

Methods: Using a nationwide, population-based, claims dataset, 5751 newly diagnosed SS cases were identified, and we further excluded those (n=198) having a history of confirmed or suspected mycobacterial infection to avoid the confounding effect of NTM infection-associated incident SS as we previously identified. A total of 5,553 SS cases were enrolled and compared them with 83,295 non-SS controls matched (1:15) for age, sex, and their year of first SS diagnosis date. The association between the risk of incident SS and antibiotics was determined by calculating odds ratios (ORs) with 95% confidence intervals (CIs) using conditional logistic regression analysis.

Results: After adjusting for potential confounders, the risk of SS was increased in patients treated with new macrolides (aOR 1.95, 95% CI 1.80–2.11), fluoroquinolones (aOR 1.52, 95% CI 1.41–1.64), and tetracyclines (aOR 1.69, 95% CI 1.59–1.79) compared with those in non-SS controls after adjusting for CCI, bronchiectasis and Helicobacter pylori infection. Notably, we found that the association was consistent among each antibiotic in these three groups of antibiotics. In contrast to these three groups of antibiotics, usage of amikacin was found to have a negative association with incident SS (aOR 0.68, 95% CI 0.53–0.87).

Conclusions: New macrolides, fluoroquinolones and tetracyclines were associated with a higher incidence of SS, whereas usage of amikacin had a negative correlation. These findings indicated the need for vigilance of SS in prescribing these antibiotics to treat NTM and other infectious diseases and warrant further mechanistic studies.

REFERENCES:

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Disclosure of Interest: None declared


ASSOCIATION BETWEEN TONSILLITIS AND NEWLY DIAGNOSED ANKYLOSING SPONDYLITIS: A NATIONWIDE, POPULATION-BASED, CASE-CONTROL STUDY

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Background: To date, two most commonly proposed environmental risk factors for ankylosing spondylitis (AS) include mechanical stress at the enthesis and infections. A recent Swedish study showed that childhood tonsillitis was associated with future development of AS. However, no Asian study has reported this association.

Objectives: To investigate the association between tonsillitis and the risk of newly diagnosed AS.

Methods: We used 2003–2012 data from the Taiwanese National Health Insurance Database to perform a nationwide, population-based, case-control study. We identified AS patients newly diagnosed from 2005 to 2012 as the study group and selected sex, age and the year of index date matched (1:6) non-AS individuals as controls. Using conditional logistic regression analysis after adjustment for potential confounders, including a history of periodontitis, appendicitis, and Charlon comorbidity index (CCI), we measured the association of AS risk with prior tonsillitis by calculating odds ratios (ORs) with 95% confidence intervals (CIs). Sensitivity analyses for the association between AS risk and tonsillitis were conducted by varying the definition of tonsillitis.

Results: We identified 37,002 incident AS cases and 222,012 matched non-AS controls. The risk of AS was associated with tonsillitis (OR, 1.80; 95% CI, 1.55–2.10) after adjustment for potential confounders. The association between AS risk and a history of tonsillitis remained significant by using various definitions of tonsillitis based on ICD9-CM Codes. Such associations were consistent across various subgroup stratified by age, sex, and a history of periodontitis or appendicitis.

Conclusions: The present study reveals an association between AS risk and prior tonsillitis.

REFERENCE:

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Disclosure of Interest: None declared


MORTALITY OF PATIENTS WITH DIAGNOSED RHEUMATOID ARTHRITIS (RA) IN GERMANY 2012: ANALYSIS OF CLAIMS DATA FROM 60 MILLION PEOPLE

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Background: Mortality data of RA patients in Germany are sparse. Recently, data on the prevalence and incidence of RA comprising about 75% of the German population became available.1 In case of chronic diseases, it is possible to
estimate excess mortality of diseased people compared to non-diseased people if prevalence and incidence are known. 

Objectives: To compute the mortality in RA patients in comparison to the population without RA in Germany, utilizing claims data from 60 million people.

Methods: We used a mathematical relation between the age-specific prevalence, incidence and mortality to estimate the age- and sex-specific hazard ratio (HR) of mortality rates for patients with diagnosed RA compared to patients without RA. Standardised mortality ratios (SMRs) for men and women were calculated using the sex-specific age distributions in Germany in 2012. In addition, we calculated years of lost life (YLL) for men and women aged 40 and 60 years with diagnosed RA.

Results: Estimation of sex-specific HR in the age range of 40 to 95 years is possible from the data in. The age-specific HRs are elevated in both male and female RA patients (figure 1, left panel and right panel, respectively) with a particular increase in the younger. SMRs in the age range of 40 to 95 are 1.93 and 2.15 for men and women, respectively. YLL at age 40 are 5.2 and 4.7 years.

Conclusions: Despite the limitation of the data source (claims data), an estimation of excess mortality in terms of the HR is possible and yields plausible results. The obtained SMRs are similar to comparable populations. At age 40 men with RA suffer more from reduced life expectancy than women with RA. At age 60 the difference in YLL between men and women with RA is virtually vanished.

REFERENCES:

Disclosure of Interest: None declared