CARDIOVASCULAR RISK AGE AND VASCULAR AGE
ESTIMATIONS IN PREDICTING CARDIOVASCULAR
EVENTS IN RHEUMATOID ARTHRITIS PATIENTS

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Background: Rheumatoid arthritis (RA) patients are at high risk of cardiovascular disease (CVD). Risk age estimations are recommended as adjuncts to assessments of absolute 10 year risk of fatal CVD events. Two risk age models based on the Systematic Coronary Risk Evaluation (SCORE) algorithm have been developed: the cardiovascular risk age and the vascular age.

Objectives: We aimed to compare discriminative ability of cardiovascular risk age and vascular age among RA patients and in subgroups of RA patients.

Methods: Patients with RA were included from an international consortium, aged 30–70 years at baseline. Those with prior CVD, diabetes and/or users of lipid-lowering agents were excluded. Cardiovascular risk age was estimated based on chronicologic age, smoking status, total cholesterol, and other lipid parameters, using the equations for low and high risk countries. The vascular age was estimated based on smoking status, total cholesterol, and systolic blood pressure at baseline. Vascular age was derived from the 10 year risk of CVD according to the SCORE algorithm, with or without high density lipoprotein cholesterol, using the equations for low and high risk countries. Performance of each risk age model in predicting CVD events was assessed by c-statistics.

Results: Among 1862 patients included, 74% were female, median (inter-quartile range) age and disease duration were 52.0 (44.0, 59.9) and 6.0 (0.1, 6.4) years, 72.5% were rheumatoid factor positive, 24.7% were using glucocorticoids and 10.3% were using biologics at baseline. Overall, 144 CVD events occurred. Median follow-up time was 5.0 (2.6, 9.3) years. C-indexes across risk models ranged from 0.71 to 0.73 with standard errors of 0.03. Across prediction models, the lowest observed concordance was found among women and in glucocorticoid users and in those with new-onset disease (≤1 year). Additional analyses including RA patients on cardiac preventive therapy yielded slightly lower c-indexes. Since SCORE was developed for use in Europe, we performed analyses on European RA patients, which yielded similar results. Certain characteristics were associated with low concordance, but standard errors were high (data not shown).

Conclusions: The cardiovascular risk age and vascular age models have comparable performance in predicting CVD in RA patients. The influence of RA disease characteristics on the predictive ability of these prediction models remains inconclusive.

Disclosure of Interest: None declared


RESULTS FROM THE PROSPECTIVE NATIONWIDE NORWEGIAN PREGNANCY QUALITYREGISTRER

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Background: To establish a register to determine disease activity, pregnancy surveillance and safety of medication during pregnancy and lactation, and monitoring this group as a quality register.

Methods: The Norwegian pregnancy register RevNatus is designed as a nationwide, web-based longitudinal observational cohort study with 17 participating centres. Pregnant patients planning a pregnancy with confirmed diagnosis of inflammatory rheumatic disease are eligible to be enrolled. The women are preferred enrolled before conception and with registrations each trimester, 6 weeks, 6 and 12 months postpartum. At baseline diagnosis, sociodemographic parameters, disease activity, anti-rheumatic medication, obstetric history, comorbidities and antibody status are reported. The register has been approved by the Norwegian Data Inspectorate and is run by The Norwegian National Advisory Unit on Pregnancy and Rheumatic Diseases.

Results: From February 2016 – January 2018 597 women were included in RevNatus, mean age at inclusion was 30.8 (17–44). Among these patients 4% had only completed primary school, 24% secondary education and 72% had completed a university education. At inclusion 4% were smoking (general population 11%) and 6% used snuff (general population 12%). At registration 6 weeks after delivery were smoking and 1% used snuff. Altogether 346 women were registered with a control 6 weeks after delivery. Of these, 31 women experienced spontaneous abortion and one therapeutic abortion. Among the remaining, 314 had living infants including 7 twin births and one triplet birth. Among the women with registration 6 week postpartum, 260 (75%) women were diagnosed with chronic inflammatory arthritis including rheumatoid arthritis, spondylarthropathy, juvenile idiopathic arthritis and unspecified arthritis. Correspondingly, 79 (23%) women were registered with inflammatory connective tissue disease (SLE, MCTD, polyderma myosis, systemic sclerosis), 3 with vasculitic disease (Takayasu’s arteritis, Mb Behcet), and 5 with primary anti-phospholipid antibody (APS) syndrome. Mean disease duration (SD) for all diagnoses was 6.5 years (4.3). Corresponding, mean disease duration in women with RA was 6.7 (4.1) years, in women with SLE 9.4 (5.1) and years in women with JIA 20.7 (7.3) years. Mean gestational age at birth for all diagnoses was 38.7 (2.5) weeks. The gestational age was lowest in SLE women 37.9 (2.5) weeks. Mean gestational week for spontaneous abortion was at 11 weeks. Mean birthweight (SD) was 3288758.7 gram in offspring of women with RA and 3133 gram in women with SLE. Overall 71 (22%) women had caesarean deliveries, 14% were acute and 9% planned caesarean deliveries. Six weeks postpartum 258 women (82.7%) were breastfeeding their babies.

Conclusions: The Norwegian pregnancy register RevNatus was established to study the course and outcomes of pregnancies in women with inflammatory rheumatic diseases as well as increased knowledge on the use and safety of treatment during pregnancy and breastfeeding. The results of the register gives data to monitor the quality of the treatment for this group of patients.

Disclosure of Interest: None declared


ANALYSIS OF SYMPTOMS IN VERY EARLY PHASE IN PATIENTS WITH ADULT-ONSET STILL’S DISEASE

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Background: The initial symptoms of Adult-onset Still’s Disease (AOSD) are non-specific and confusing with those of common cold, which can lead to the delay of diagnosis and treatment.

Objectives: To clarify characteristic features in AOSD in very early phase and to find the key symptoms and markers to an earlier diagnosis and treatment.

Methods: We retrospectively reviewed consecutive AOSD patients in our hospital from April 2012 to July 2017. Symptoms and laboratory data before treatment were collected form their charts and analysed.

Results: A total of 62 patients were enrolled. The mean age at diagnosis was 45.9 and female was 61%. The duration from the first symptoms to the first visit to a medical facility was 18.7 days, from the first visit to the first blood test was 5.8 days, from the first blood test to the fulfilment of Yamaguchi’s Criteria was 11.0 days, and from the fulfilment of Yamaguchi’s Criteria to the treatment was 22.2 days. During the course of developing the disease, fever was found in all patients, skin lesion in 91.9%, arthralgia in 87.1%, sore throat in 66.1%. Laboratory and characteristic features on the predictive ability of these prediction models remains inconclusive.

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