SAT0601

RELATIONSHIP BETWEEN BODY MASS INDEX AND NAILFOLD CAPILLAROSCOPY IN PRIMARY AND SECONDARY RAYNAUD'S PHENOMENON

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Background: Raynaud's phenomenon (RP) is a diffuse clinical manifestation (3-5% of general population) RP is often secondary to autoimmune systemic diseases, while the condition is classified primary if no underlying disorders can be found. A lower body mass index (BMI) was associated with a greater risk of developing RP, perhaps due to greatest sensitivity to cold temperatures

Objectives: The objective of our study was to evaluate the association of BMI with clinical and capillaroscopic features in primary and secondary RP.

Methods: Consecutive patients at the first access to a Rheumatology Outpatient Clinic over a 13 months period were screened to RP; nailfold videocapillaroscopy (NVC) was carried out and qualitative and quantitative assessment was performed. Diagnosis of RP was defined in patients who identified color pictures of witnessed attacks. Patients enrolled were screened for secondary causes of RP. RP was classified as primary when no abnormalities were found. Weight and height were collected in clinical records and patients were divided in 3 groups according to their BMI: underweight (BMI < 18.5 kg/m²), normal weight (BMI 18.5–25 kg/m²), and overweight (BMI > 25 kg/m²). Chi-square test to compare categorical variable and Parametric Student t-test to comparing mean values of normally distributed data were used. p < 0.05 was considered to be statistically significant.

Results: RP was diagnosed in 100 of 1416 patients (7.06%). Of these, 73 (10M, 63F) accepted to undergo NVC. An autoimmune disease was found in 35 patients (47.9%), of which 2 were underweight, 14 normal weight and 19 overweight. Of 38 patients with primary RP, 3 were underweight, 23 normal weight and 12 overweight. BMI was significantly higher in secondary RP (p=0.03). Overweight patients with secondary RP were older (p=0.01), but with a disease duration not statistically significant longer (p=0.26). In secondary RP, avascular areas and neoangiogenesis were founded only in overweight patients. Moreover, in secondary RP overweight was correlated with decreased capillary density (p=0.04). There was not association between BMI and capillaroscopic abnormalities in primary RP.

Conclusion: In our study BMI was correlated with microvascular changes only in patients with secondary RP. Our findings may suggest a role for obesity in the microcirculatory dysfunction in the autoimmune diseases. Further studies are needed to generalize results and to find a causative role.

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SAT0602

INCIDENCE OF INFLAMMATORY ARTHRITIS BEFORE AND AFTER THE INTRODUCTION OF NEW CLASSIFICATION CRITERIA: A SYSTEMATIC REVIEW

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Background: Hallmark in treatment of inflammatory arthritis (IA); rheumatoid arthritis (RA), axial spondyloarthritis (axSpA) and psoriatic arthritis (PsA), is to treat early with intensive regimens to induce remission and prevent disability on the longer term [1,2,3]. To be able to start treatment in an earlier stage of the disease, around a decade ago new classification criteria sets were introduced; 2010 ACR/EULAR for RA, 2009 ASAS for axSpA and 2006 CASPAR criteria for PsA. Compared to old criteria sets for RA, axSpA and PsA these new ones cover a broader spectrum of early disease features [2]. Although classification criteria are not developed for diagnosing, they are widely adopted for use as aids in diagnosing IA [4]. Therefore, the new criteria sets might have led to an increased reported incidence of IA [5].

Objectives: To determine whether the reported incidence of IA has changed after introduction of the new classification criteria this systematic review has been conducted.

Methods: A systematic literature search was conducted using Embase, Medline Ovid, Cochrane Central and Web of Science from database inception to September 2019. For this study only articles that addressed the incidence of IA in adult referrals towards the rheumatologist were included (Fig. 1). A meta-analysis was performed to compare the pooled estimates and 95% confidence intervals (CI) for the incidence of IA before and after the introduction of new classification criteria.

Figure 1. PRISMA flow diagram of study selection

Graph 1. Forest plot of incidence of rheumatoid arthritis compared before and after introduction of new classification criteria in 2010

Results: A total of 14 studies reporting on the incidence of RA (n=10), axSpA (n=7) and PsA (n=4) in adults newly referred towards the rheumatologist were included. Pooled incidences were for RA 11% (95% CI 6–15%); for axSpA 4% (95% CI 3–5%); and for PsA 4% (95% CI 3–5%).

Graph 1 and 2 show a significant increase in incidence of 9% for RA (p=0.019) and 2% for axSpA (p=0.006) after the introduction of the new classification criteria for respectively RA and axSpA. For PsA only one study was included reporting on the incidence of PsA in rheumatology centres before 2006, hence pooled estimates before and after introduction of new criteria could not be compared.