**SUPPLEMENTARY DATA**

***Supplementary Appendix S1 - Study population***

The investigations of this retrospective study were carried out in 41 women with SLE (mean age, 47 ± 29 years) admitted to hospital for a routine checkup; all patients had already been placed on medical therapy (of several months to several years duration, the average 32 months). The following drugs were administered separately or in combination: prednisone (7.5 – 15 mg daily in 37 patients) or various immunosuppressants, including azathioprine (50 – 100 mg daily in 12 patients), cyclophosphamide (200 mg daily in 1 patient), methotrexate (15 mg weekly in 2 patients). One patient received cyclosporine A in a dose of 100 mg daily. Quinagolide (12. 5 – 37.5 µg daily in 9 patients), a prolactin inhibitor that acts as an agonist of the dopamine receptor as well as chloroquine (250 mg daily in 4 patients) were also administered. If needed, nonsteroidal anti-inflammatory drugs and analgesics were also allowed. Prednisone was the most frequent drug used separately (19 women), while a combination treatment of prednisone and azathioprine had been prescribed to 12 women and was the most frequently applied drug combination.

SLE was diagnosed in patients who met at least four of the 1997 update [1] of the 1982 American College of Rheumatology criteria for classification of SLE [2]. When qualifying patients for investigation tests, disease activity was assessed using the SLEDAI (Systemic Lupus Erythematosus Diseases Activity Index) [3]. The SLEDAI score was < 10 in all study participants, thereby indicating mild-to-moderately disease activity [4]. In the investigated group three or four out of nine organs were affected by disease process. No patients exhibited severe damage to the kidneys (GFR in all patients was > 60 ml/min/1.73m2) or liver. The control group consisted of 38 healthy medication-free women that were age-matched (mean age, 44 ± 26 years) and place of residence. Healthy control participants were recruited from medical staff, whose laboratory results were within reference ranges.

Both the study and control groups included approximately 29% perimenopausal and postmenopausal women, 18% regular smokers, and less than 10% women who were using oral contraceptives or hormone replacement therapy. Several SLE patients (20%) were administered low doses of hypolipidemic agents. Approximately 40% were successfully treated with antihypertensive drugs (low doses of angiotensin converting enzyme inhibitors, angiotensin II receptor antagonists, low doses of beta-blockers and calcium channel blockers). The mean body mass index (BMI) in the SLE group was 26.1 kg/m2  versus 25.2 kg/m2 in the control group. No patients with SLE had clinical symptoms of coronary artery disease (CAD). In all SLE patients and the controls ejection fraction (EF) was always ≥ 55%.

The following laboratory tests were performed to determine disease activity and screen for autoimmune disorders: erythrocyte sedimentation rate (ESR), anti-DNA antibodies, antinuclear antibodies (ANA), anticardiolipin antibodies (aCLA), and complement factor C3 levels in the serum.

The exclusion criteria were as follows: rapid progression of SLE with life-threatening complications (severe SLE course with central nervous system involvement), end-stage kidney failure, hemoglobin concentration < 8 g/dl, platelet count below 80.000/ mm³, myocarditis, pregnancy, lactation, liver failure, insulin-dependent diabetes mellitus (two patients with impaired fasting glycaemia were recruited), neoplastic disease, acute or chronic inflammatory condition irrespective of the location thereof, a history of or current hepatotropic viral infection (HBs and HCV) at the time of the study, congestive heart failure, and hypothyroidism.

Blood samples were collected mid-morning between 7 and 8 am from fasting and resting participants. Centrifuged serum was frozen and stored at the temperature -80°C until assay. The samples were immediately coded and the measurements were performed in a blinded manner. The study was approved by the local independent bioethics committee. All participants provided written informed consent.

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***Supplementary Appendix S2 - Limitations of study***

Several limitations deserve consideration in the present study. Firstly, the study group is small and it might weaken the statistical power of the study. However, we must be aware that SLE is listed as a rare disease and therefore the investigated group is not very large. Secondly, variable disease activity, different disease pathogenesis, administered medications and the applied doses can influence both the obtained results and atherosclerosis development. It should be emphasized that the precise exclusion of the factors which might modify the obtained results is difficult as SLE is a disease of heterogenic nature. Thirdly, as it is known speaking about atherosclerosis, rather internal carotid, superficial femoral and the bifurcations should be incorporated into the study, whereas in our investigation scheme our main aim was to assess IMT in common carotid and femoral arteries in SLE patients. Then we recognize the obtained results as a preliminary report of investigations which will be continued.