Heart Rate Recovery Is Impaired in Patients with Psoriasis

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We would like to thank Balta et al. [1] and Canpolat et al. [2] for their comments on our paper entitled ‘Heart rate recovery is impaired in patients with psoriasis’ [3]. We reported that heart rate recovery (HRR) was significantly lower in patients with psoriasis and that HHR in the first minute of exercise was correlated with the duration of psoriasis, the psoriasis area and the severity index score.

In their letter, Balta et al. commented that the presence of chronic obstructive pulmonary disease, electrolyte disorders and thyroid dysfunction may have possible effects on HRR in patients with psoriasis. As mentioned in Methods, patients with comorbid diseases were excluded from the study and the HRR of both patients with psoriasis and controls were determined using the treadmill stress test according to the Bruce protocol. The duration of exercise was favourable in the two groups. We excluded patients with chronic obstructive pulmonary disease because it would have been troublesome for them to achieve such a favourable duration of exercise. Recall that we also excluded patients with chronic renal failure and thyroid dysfunction. Electrocardiography and trans-thoracic echocardiography were performed before exercise testing and signs of severe hypothyroidism or hyperthyroidism such as tachycardia and pericardial fluid were not present in any of our patients. However, all of our patients underwent a physical examination before inclusion for the detection of possible comorbidities which may influence the results of exercise testing.

With regard to Canpolat et al., we would like to further thank them for their constructive comments. We agree with their comment that the treadmill exercise test is useful in screening patients for coronary artery disease and also in the detection of blunted heart rate recovery after exercise. However, ischemic heart disease itself may lead to blunted heart rate recovery after exercise [4]. Hence, we did not include patients with known coronary artery disease in our study.

References