Letters to the Editor

We present the case of a 21-year-old athlete, with no pathological or family history of note, who trains regularly and intensively and reports feeling run-down, with underperformance (physical and mental) and dizziness. Exploration showed sinus bradycardia <40 beats/min, due to which echocardiography was done (normal left ventricular function), a stress test (normal increase in blood pressure) and blood analysis (urea, serum ferritin and liver enzymes within normal limits). Overtraining syndrome was diagnosed and rest indicated.

Two 123I-MIBG scintigraphies were done, one at diagnosis and another after 10 weeks of rest, 370 Mbq of 123I-MIBG was administered intravenously, and planar anterior thorax images acquired at 4 h. The uptake of 123I-MIBG was quantified via the heart/mediastinum ratio (HMR) which, at the time of diagnosis, was slightly reduced (HMR, 1.71; normal >1.8) (Figure 1) but which normalized after rest (HMR, 2.12) (Figure 2).

In conclusion, cardiac 123I-MIBG scintigraphy can be a useful method for diagnosing and controlling overtraining syndrome in the sportsperson.

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Figure 1. 123I-MIBG scintigraphy at diagnosis (arrow: cardiac region).

Figure 2. 123I-MIBG scintigraphy after rest (arrow: cardiac region).
REFERENCES