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The Overtraining Syndrome - facts & fiction

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COMMENTARY

The Overtraining Syndrome – facts & fiction

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Previous studies on 'Overtraining' failed to make a clear distinction between 'Overreaching' and 'Overtraining' (Meeusen et al., 2006). The purpose of the consensus statement was not only to review possible signs & symptoms of the Overtraining Syndrome (OTS), but also to try to line up the outcome of 'overload training' into categories. Functional Overreaching (FOR) is used for a temporary decrease in performance following overload training. This overload will be used by athletes in order to reach an increase in sport-specific performance after a short recovery period. When the overload training has detrimental effects in the long term, a state of Non-Functional Overreaching (NFOR) occurs where full recovery will not happen in the pre-planned period (Meeusen et al., 2006, Nederhof et al., 2006). We agree that the distinction between NFOR and the Overtraining Syndrome is sometimes difficult to make since prolonged maladaptation can occur in both cases, but these features are emphasized in OTS, not only for performance of the athlete (possibly because of a detraining), but also of several biological, psychological, neurochemical, clinical, and hormonal regulation mechanisms. We can therefore diagnose OTS only when other possible causes of prolonged underperformance (i.e. that result in NFOR) have been examined and eliminated. Diagnosis of OTS is based on an 'exclusion diagnosis'.

Recovery of (disturbed) symptoms is indeed a possible guide in the 'recuperation' of the athlete for both clinical and mental aspects. This is an important issue and there is a need for well defined research in this area, maybe the proposal recently put forward by Nederhof et al., (2006) can help to detect early markers.

Performance tests as measures are indeed 'polluted' by the ongoing decrease in performance that results of the ongoing 'underperformance' during NFOR and OTS. However, detraining will not show the specific hormonal disturbances observed in OTS.

We feel that several signs and symptoms need to be examined in order to pinpoint the diagnosis of OTS. Sometimes simple symptoms such as feeling of heavy legs during minor exercise intensities, fatigue during daytime and sleeping disorders should be examined. Therefore we have proposed a checklist that can help clinicians to diagnose NFOR and/or OTS.

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