EDITORIAL

Negative results worth publishing

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Many patients in my out-patient clinic have one symptom in common: they are tired. If I know their diagnosis I tend to link their tiredness to the underlying disease and hope that treatment will lessen their fatigue. I get disappointed a lot, fatigue is a symptom that is hard to treat. This is especially true for patients presenting with fatigue whom I can't diagnose. Some of these I ultimately diagnose as suffering from chronic fatigue syndrome (CFS), a long-lasting condition characterized by intense and disproportional fatigue after exertions, frequently accompanied by musculoskeletal pain, headaches, cognitive impairments and other symptoms. It is a syndrome with major impact on the quality of life.[1]

It is commonly believed that CFS is due to low grade inflammation and that inhibition of inflammation may therefore lead to alleviation of symptoms. But where is the evidence? There are numerous studies on gene expression profiles and cytokine levels, as well as on numbers and types of T- and B-cells that report differences between patients and healthy, non-fatigued controls.[2] Unfortunately, however, the results of such studies are highly inconsistent.[3] There is also a tendency to report positive results from studies while rejecting negative results, so that the effects of alterations in immune-regulation may be overestimated. It is hardly surprising, therefore, that no immune-modulating treatment has so far unequivocally led to major improvements or to total resolution of symptoms in patients with CFS.

In the current issue of the journal Roerink et al. report on the results of their study on TGB-beta in patients with CFS. In a nutshell: they find no evidence for a major role of TGF-beta in CFS, or at least no difference in circulating levels between patients and controls. Apart from presenting negative results the authors also hint on reasons for discrepancies between previous studies on this subject, pointing at methodological pitfalls in laboratory analyses. An issue often overlooked but highly important. That said, the pathophysiologic puzzle in CFS remains unsolved.

REFERENCES

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