About 4.6 million persons in Germany are now taking statins, i.e., drugs that inhibit the enzyme 3-hydroxy-3-methylglutaryl-coenzyme A (HMGCoA) reductase. Statins lower the concentration of low-density lipoproteins (LDL) and thereby lessen the rate of cardiovascular events; the size of this effect depends on the extent of lowering of the LDL cholesterol concentration. Muscle symptoms are a clinically relevant side effect of statin treatment. This review is based on pertinent publications retrieved by a selective literature search, and on the current recommendations of the European Atherosclerosis Society. At least 5% of patients taking statins have statin-associated muscle symptoms (SAMS). The etiology of SAMS is heterogeneous. SAMS may seriously impair quality of life and cause complications of variable severity, up to and including rhabdomyolysis (in about 1 in 100,000 cases). SAMS often lead to a reduction in the prescribed dose of the statin, while also negatively affecting drug adherence. More than 90% of patients with SAMS can keep on taking statins over the long term and gain the full clinical benefit of statin treatment after a switch to another type of statin or a readjustment of the dose or frequency of administration. If the LDL cholesterol concentration is not adequately lowered while the patient is taking a statin in the highest tolerable dose, combination therapy is indicated. SAMS are important adverse
effects of statin treatment because they lessen drug adherence. Patients with SAMS should undergo a thorough diagnostic evaluation followed by appropriate counseling. In most cases, statins can be continued, with appropriate adjustments, even in the aftermath of SAMS.