Medicinal treatment of overweight

People who are overweight are at increased risk of cardiovascular disorders, certain forms of cancer and mortality from these conditions. There have been no scientifically sound studies to find out whether losing weight, for instance by using certain drugs, actually reduces these risks. Even though this is in fact the most clinically relevant question for scientists and healthcare workers, it remains unanswered. Registration authorities still accept drugs that result in a statistically significant but, in absolute terms, limited weight reduction compared to placebo, often no more than a few kilogrammes. This limited effect is lost after the drug is discontinued, and it is doubtful whether these differences are clinically relevant. In fact, consumers probably attach greater value to a cosmetically relevant weight reduction.

The approach used by the registration authorities, of authorising the marketing of weight-loss drugs on the basis of the above criteria, raises questions, especially as recent history has shown that these drugs may have serious and even fatal side-effects, causing them to be taken off the market. Aminorex became available in the 1960s, and was found to cause pulmonary hypertension, while (dex)fenfluramine was found to cause heart valve disorders in the 1970s. The market authorisation for sibutramine was suspended in 2008, mostly because of psychiatric side-effects. The balance between efficacy and side-effects of orlistat, currently the only registered and available weight-loss drug, is not favourable either. The drug has low efficacy and very often induces gastro-intestinal side-effects. In addition, the use of orlistat carries a risk of rare but serious cases of liver damage.

Recently, two new drugs were given a marketing authorisation for the treatment of overweight: naltrexone/bupropion and liraglutide, the latter having already been registered for the treatment of diabetes mellitus. Once again, the finding of a limited weight reduction of about 4–5 kg was considered sufficient for registration. If the risks (including long-term risks) are taken into consideration, these drugs are also characterised by a negative balance between efficacy and side-effects. Although it would be great for healthcare workers and patients alike if a safe and effective weight-loss drug were available, such a medicinal treatment of overweight currently remains illusory, and the two new ‘innovations’ discussed in this issue of Geneesmiddelenbulletin do not alter this. The marketing of drugs to treat overweight and obesity has so far had very limited success. Even though research into the efficacy of non-medicinal interventions like advice on diet and physical exercise has also found them to have limited efficacy, these remain the treatment options of first choice. The solution to the problem of obesity is not to be found in the doctor’s surgery or the pharmacy, but in prevention, an approach in which the food industry and governments have a role to play.

References*

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*The literature refers to the Dutch text*