Added benefit of Cannabis sativa for spasticity due to multiple sclerosis is not proven

September 17 2012

An extract from the plant *Cannabis sativa* (trade name Sativex) was approved in May 2011 for patients suffering from moderate to severe spastic paralysis and muscle spasms due to multiple sclerosis (MS). In an early benefit assessment pursuant to the "Act on the Reform of the Market for Medicinal Products" (AMNOG), the German Institute for Quality and Efficiency in Health Care (IQWiG) examined whether the new drug, which is used as a mouth spray, offers an added benefit over the optimized standard therapy. However, no such added benefit can be inferred from the dossier, as the drug manufacturer deviated from the specifications of the Federal Joint Committee (G-BA) and chose a different comparator therapy.

Comparison of different possibilities for optimizing treatment

The extract from *Cannabis sativa*, which contains the active ingredient combination of delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD), is approved as add-on therapy to the already used antispastic drugs. Usually, drugs such as baclofen or tizanidine are given to treat muscle spasms. The cannabis extract can be considered when, despite an individual, patient-tailored use of these drugs, the symptoms caused by spasticity cannot be adequately relieved.

The G-BA specified an optimized standard therapy containing baclofen,

tizanidine or drugs that are approved for the treatment of spasticity in underlying neurological diseases as the appropriate comparator therapy. At least two previous attempts at treatment were to have been made, in each of which different oral antispastic (spasmolytic) drugs had been used in an optimum way. Again, at least one product was to have contained the active ingredients baclofen or tizanidine. The aim of the assessment by IQWiG was to compare the additional administration of the *Cannabis sativa* extract with other available possibilities for optimizing treatment and to assess the added benefit.

Optimization of premedication was not planned in any of the studies

However the manufacturer deviated from this specification of the G-BA, without providing adequate justification for doing so. In its dossier, the manufacturer drew no conclusions about the extent and probability of the added benefit compared to the appropriate comparator therapy specified by the G-BA. The studies submitted by the manufacturer were not suitable for reaching conclusions on added benefit in comparison with an optimized standard therapy. This was because in none of these studies was it planned to optimize the antispastic premedication. Instead, this treatment was to be continued unchanged. Therefore there is no proof from the manufacturer's dossier of an added benefit of *Cannabis sativa* extract compared to the appropriate comparator therapy of the G-BA.

G-BA decides on the extent of added benefit

The dossier assessment is part of the overall procedure for early benefit assessment conducted by the G-BA. After publication of the manufacturer's dossier and its assessment by IQWiG, the G-BA initiates a formal commenting procedure which provides further information and

can result in a change to the benefit assessment. The G-BA then decides on the extent of the added benefit, thus completing the early benefit assessment.

An overview of the results of the benefit assessment by IQWiG is given by an English-language extract. You can also find easily understandable and brief German-language information on the website gesundheitsinformation.de, published by IQWiG.

The G-BA website contains general English-language information about the procedure of benefit assessments pursuant to §35a Social Code Book (SGB) V and specific German-language information on the assessment of Cannabis *sativa*.

Provided by Institute for Quality and Efficiency in Health Care