

I.1 - Albendazole, mebendazole and praziquantel for the indication of treatment of taeniid cestode cysts in the WHO Model List of Essential Medicines and the WHO Model List of Essential Medicines for Children.

MSF strongly supports the proposal from the WHO Department of the Control of Neglected Tropical Diseases to expand the indications of albendazole, mebendazole and praziquantel to include the treatment of taeniid cestode cysts in both the WHO Model List of Essential Medicines (EML) and the WHO Model List of Essential Medicines for Children (EMLc).

MSF welcomes the rigorous and comprehensive review and the proposal for alignment on protocols currently existing in several guidelines and documents: the 1995 WHO “Model prescribing information – drugs used in parasitic diseases”, the 2018 “Infectious Diseases Society of America (IDSA) and American Society of Tropical Medicine and Hygiene (ASTMH) Clinical practical guidelines” and the 2020 WHO “Management guideline for *Taenia solium* neurocysticercosis”.

Albendazole is included in the EML since 1989, in the section 6.1 Anthelmintics. In the electronic EML, the indications listed are: echinococcosis, cysticercosis, trichuriasis, ascariasis, enterobiasis, hookworm diseases, and filariasis. The 400 mg chewable tablet is widely available and generics are marketed.

Mebendazole is included in the EML since 1977, in the section 6.1 Anthelmintics. In the electronic EML, the indications listed are: trichuriasis, ascariasis, enterobiasis and hookworm diseases. The 500 mg chewable tablet is not widely available, donations are made to WHO by the manufacturer.

Praziquantel is included in the EML since 1979, in the section 6.1 Anthelmintics. In the electronic EML, the indications listed are: paragonimiasis, clonorchiasis, opisthorchiasis, schistosomiasis, taeniasis due to *Taenia solium* or *Taenia saginata*, hymenolepiasis and diphyllbothriasis. The 500 mg and 600 mg scored tablets are not widely available, donations are made to WHO by the manufacturers.

Three taeniid tapeworms, *Echinococcus granulosus*, *Echinococcus multilocularis* and *Taenia solium* have pathogenicity usually related to the larval cystic stages of the life cycle.

Echinococcus granulosus can cause cystic echinococcosis, *Echinococcus multilocularis*, alveolar echinococcosis, and *Taenia solium*, cysticercosis most commonly neurocysticercosis.

Albendazole is the first choice for the treatment of the 3 taeniid cestode cysts, mebendazole is the second choice for cystic echinococcosis and alveolar echinococcosis (if albendazole is not available or not well-tolerated). Albendazole is the drug of choice due to a better bioavailability and a reduced pill burden compared to mebendazole. As the duration of treatment can be as much as life-long, a reduced daily pill burden will be important to allow a better adherence to treatment.

Praziquantel was the first available treatment for neurocysticercosis, it can be replaced by albendazole which is cheaper and more widely available. In some cases, as multiple cysts, praziquantel is recommended to be combined with albendazole.

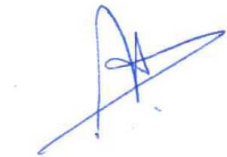
MSF would like to draw the attention of the Expert Committee on the following facts:

- As specified in the application, MSF agrees that these treatments of taeniid cestode cysts require specialized diagnostic or monitoring facilities, and/or specialized medical care, and/or specialized training, therefore MSF agrees to include them in the Complementary list on the EML for this indication.
- In the treatment of cystic echinococcosis with albendazole as first choice as well as mebendazole as second choice, the antiparasitic treatment will depend on the cyst stage, and any other treatments that might also be conducted (such as percutaneous treatment or surgery). The first-line treatment is surgery and albendazole (or mebendazole as second choice) is useful in addition or instead of surgery, depending on the location, number, and stage of the cysts.
- In the treatment of neurocysticercosis, specialized diagnostic tests are required (imaging) before antiparasitic treatment as the latter depends on the location, number, and stage of the cysts. Neurological and ocular cysticercosis should be managed in specialized facilities. Antiparasitic treatment without diagnosis of location by computerised tomography and/or magnetic resonance imaging can worsen the symptoms, even threaten the life. Neurosurgical treatment can be required.
- As albendazole and mebendazole should be avoided in early pregnancy (first trimester), women of child-bearing age should be advised on contraceptive options before initiation of the treatment.

MSF has been using albendazole since 1997, mebendazole since 1994 and praziquantel since 1988 in its programs.

MSF urges the 23rd Expert Committee on the Selection and Use of Essential Medicines to expand the indications of albendazole, mebendazole and praziquantel to the treatment of taeniid cestode cysts in both the WHO Model List of Essential Medicines and the WHO Model List of Essential Medicines for Children.

For Médecins Sans Frontières

A handwritten signature in blue ink, appearing to be 'M. Henkens', with a long horizontal stroke extending to the right.

Myriam Henkens, MD, MPH
International Medical Coordinator