

Editorial

Food-Borne Parasites and the Relevant Therapeutic Targets

Infections caused by food-borne parasites continue to be a serious public health problem, especially in the developing world. In the industrial countries, this kind of illnesses are not uncommon in the segment of population who adhere to fad diets containing raw flesh and in cultures where dishes made of raw fish or meat are a long-standing tradition. It is believed that the most effective solution to this problem lies in education of the populace about proper cooking procedures as well as in the improvements of sanitation and food testing technologies in the food industry. Be that as it may, food-borne infections are unlikely to disappear any time soon and effective treatments are absolutely necessary for effective management of the illnesses caused by parasites. The advances in medical science and pharmacology during the past few decades have brought us a variety of effective anti-parasitic drugs that are able to clear a patient of certain types of food-borne parasites almost completely within a few weeks. Nonetheless, many of these drugs have serious side effects and are only effective during one particular stage of the life cycle of a parasite. In some infections, such as angiostrongyliasis, the existing antihelminthic drugs are not effective or only marginally effective. In other words, there is plenty of room for improvement among the currently used antihelminthic treatments and we need new medicines that are safer and more effective.

The great progress that has been made recently in the genetics of common parasites and in elucidating the function of various parasitic proteins and other macromolecules has made it possible to identify novel promising therapeutic targets in the parasitic infections of humans. This special issue of *Infectious Disorders – Drug Targets* is dedicated to the review of recent literature on precisely this topic: new drug targets for the treatment of helminth infections. We have eight interesting and thought-provoking articles, each dealing with a different species of food-borne parasites. These articles provide a state-of-science review of parasite biology, life cycle, current guidelines for diagnosis and treatment, and, most importantly, future directions in the search for novel modalities for treatment and prevention of a relevant human illness. The readers will enjoy the thoroughness and clarity of presentation of the material. This up-to-date synthesis of research data will no doubt help the scientific community to develop new treatments and preventive interventions, and, ultimately, to reduce the burden of the parasite-related diseases worldwide.

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