

THE FUTURE OF SEROLOGY AS A DIAGNOSTIC TOOL FOR ASCARIASIS.

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The nematode parasite *Ascaris lumbricoides* is estimated to infect over 800 million people and is considered to be an important neglected tropical disease pathogen. Ascariasis has a substantial impact on public health, but routine diagnosis still relies on the detection of eggs in stool. This technique has important limitations in terms of both application and interpretation. Unfortunately, the development of novel, more sensitive diagnostic tools has been rather limited. For the veterinary field, where they struggled with similar diagnostic challenges, a new serological test for the detection of *A. suum* exposure in fattening pigs was developed in our lab a few years back and has since been widely applied in a number of European countries. This test is based on the immune recognition of the *A. suum* haemoglobin antigen (AsHb) by infected pigs. Given the nearly identical genetic and antigenic constitution of pig and human *Ascaris*, we recently modified the test to detect human *Ascaris* infection. Evaluation of this test using a serum sample set from a clinical trial in an Indonesian community has shown that a serological tool could be a potential asset in certain stages of STH control programs. The goal of this talk will be to provide an overview of the recent developments in serodiagnosis for *Ascaris* and to highlight the possible applications for serology. The general difficulties involved in evaluating and interpreting serodiagnostic tests for STH will also be discussed.