THE EFFECT OF HOST IMMUNITY ON EGG EXTRUSION DURING *SCHISTOSOMA MANSONI* INFECTION IN THE GOLDEN HAMSTERS

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SUMMARY

The study of immunopathology in parasitic infections is crucial especially in the attempts to develop control measures since a better understanding of the factors that influence immunopathogenesis may help to elucidate the complex host parasite relationship.

In Schistosomiasis eggs are believed to be the main cause of the pathology associated with this disease. Eggs are either extruded with the faeces or are trapped in tissues such as the liver and the gut. The host then responds to these trapped eggs immunologically involving both humoral and cellular mediated responses which culminate in granuloma formation around the deposited eggs. Such granulomas are thought to minimize the spread of toxic substances from the eggs to the rest of the organ and cause generalized tissue destruction, but at the same time leads to pathological fibrosis.

Previous workers have shown that host immunity influences granuloma formation since immunodeficient hosts tend to have reduced granulomas. We present results which confirm these earlier observations and suggested that in hamsters, the more immune the host is, the more eggs trapped in the tissues and therefore less eggs are extruded in such hosts.

Conversely the less immune the host is, the fewer the eggs trapped in tissues and the more the eggs passed out with faeces. Suggestions for further research work have been made.