



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**HANAA ALY**



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# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



### يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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## **Antigenic and genotypic changes in some parasites as a result to development in different hosts**

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Under supervision

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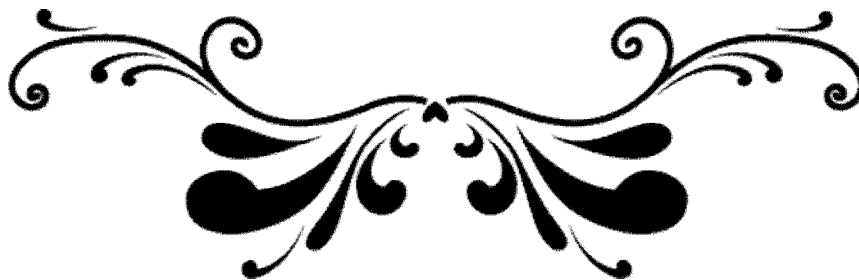




*Dedication*

*To my Parents, my Husband, my Son  
“Ahmed” and Daughters “Ayah &  
Mariam”.*

*The reason of what today I became thanks  
for your great support and continuous care.*







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### Abstract

The diagnostic efficacy of different *Hydatid cyst* (HC) antigen is still affected by the host from which the HC extracted. The present study investigated the diagnostic efficacy of HC protoscolices somatic antigens (HCPsS-Ag) extracted from different hosts in diagnosis of zoonotic hydatidosis using enzyme-linked immunoelectro-transfer blot (EITB). Comparing the antigenic similarity of these antigens on genotype bases revealed that HC-G6 genotypes extracted from infected patients contain eight specific polypeptide fractions react versus HC-G6 infected patient's sera. Five of them (28,32,38,59 and 89 Kilo Dalton (KDa) and two of them (28 KDa and 45 KDa) were reacted versus HC-G1 and HC-G4 infected sheep and equine, respectively. Six HCPsS-Ag-G1 fractions of sheep react versus HC-G1 sheep infected sera, four (28,32,52 and 58 KDa) and two of them reacted versus HC-G6 and HC-G4 infected patient and equine sera, respectively. HCPsS-Ag from HC genotypes that developed in humans and animals as HC-G6 and HC-G1 can substitute each other for diagnosis of infection than antigens extracted from non-zoonotic HC-G4 of equine.

Concerning the host-parasite relation among another parasite, nested polymerase chain reaction (PCR) analysis for a 292 bp fragment of 16S-rRNA ribosomal unit from children and calves *Giardia* isolates proved infection of calves by zoonotic *Giardia* (Assemblage A) and non-zoonotic (Assemblage E). Assemblage (A) are common in buffalo calve, easily distributed by these animals elsewhere and infect the surrounding human. Fraction ( $\alpha$ -1 *giardin*) at the molecular weight (MW) of 29-34 KDa appear as specific genotype-related fractions. Detection of this fraction using EITB can be used as a preliminary investigation in the identification of zoonotic giardiasis.

**Keywords:** Hydatidosis, *Giardia*, Genotype, Human, Animal, PCR, EITB.



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