BS. VET. MED. J. JULY 2008 VOL. 18, NO.2, P 38 -39

Beni-Suef
Veterinary Medical
Journal

Case Report

Update of fasciolosis- transmitting snails from Tawarga, Libya

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Out of 50 *Biomphalaria alexandrina* snails 25 (50%) were found infected with Fasciola spp. This snail species is the suitable intermediate host of *Schistosoma mansoni* . It is worthy to mention that this is the first record of Fasciola in Libya which represent a new locality record.

Tawarga pond occupied an arid area at 38 km east Misurata city in Libya. This the endemic area of Leishmaniasis and Schistosomiasis in Libya. *Biomphalaria alexandrina* snail was translocated to the pond of Tawarga with fingerlings of Tilapia spp. fishes emerged into the pond before 20 years ago (Libyain center for preservation of tropical and endemic diseases ,2005)

Materials and methods

Live snails were collected from Tawarga ponds in Musurata in Libya and identified as Biomphalaria alexandrina according to (Delucena, 1953 and Mandahl -Barth ,1962).

Fig.1

Fig.2

Fig.3

Each snail was crushed between two slides and examined by low power microscope for larval stages of trematode parasites. Specimens were fixed in 4% formalin. The specimens stained by acetic acid alum-carmine stain, dehydrated, cleared and mounted .Identification of cercariae according to (Faltynkova *et al.,* 2008).

Results and Discussion

During the routine work for searching Schistosoma cercariae in their snail host *Biomphalaria alexandrina*. The authors found cercariae (Figs.1,2) and rediae (Fig. 3) of Fasciola spp. The present study revealed that ,out of 50 Biomphalaria alexandrina snails 25 (50%) were found naturally infected with Fasciola spp. Parasites were detected and identified as cercariae and rediae of Fasciola spp. according to (Faltynkova *et al.,* 2008). Previous studies revealed 100% experimental infection of snail Pseudosuccinea columella with miracidium of Fasciola spp. as new host record in France (Pointier *et al.,* 2007) . So far, the presence of this snail in Europe as intermediate host of Fasciola (Pullan, 1969; Ponder, 1975; Ditrich , *et al.,* 1992; Hechinger,2007). In Tunisia, Hamm-ami *et al.,* 2007 reported human infection of fasciola in three habitats . The prevalence of human infection was 6.6% while the presence of the parasite was detected 14.3 % ,35 % and 68.4 % in cattle , sheep and goats respectively .In Egypt, Dar *et al.,* 2005 reported *Biomphalaria alexandrina* snail was naturally infected with Fasciola spp. They were not recorded the incidence of infection. The present work was found 50% naturally infected, as the first record in Libya and added the incidence (50%) of

infection. The prevalence of the infection of intermediate host Galba truncatula (G. truncatula) with Fasciola spp. were 19.2% from Tunisia (Hammami *et al.,* 2007; Czapski, 1965)

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الكشف عن انتشار مرض الفاشيولا فى بعض القواقع بمنطقة تورغا فى ليبيا

أثناء فحص عدد ٥٠ قوقع من نوع بيومفالاريا الكساندرينا من بحيرة تورغا شرق مدينة مصراتة في ليبيا والتي تعتبر مياه عذبة تنبع من عين ارضية طبيعية وتلك المنطقة تنتشر بها أمراض اللشمانيا والبلهارسيا المعوية وجد عدد ٢٥ قوقع مصاب بسركاريا الفاشيولا وقد وجدت الريديا والسركاريا بكثافة فى القواقع المصابة وهذه أول مرة يسجل فيها هذا النوع من القواقع من تلك المنطقة مصابة بالفاشيولا