

were immunoreactive with significantly higher number of samples.

**Conclusion:** The sensitivity and specificity of 2D-PAGE EITB assay were higher than that reported earlier with the use of lentil lectin purified glycoprotein antigenic fractions EITB assay, which is considered the gold standard serodiagnostic method for neurocysticercosis.

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58.005

#### Prevalence of intestinal parasitic infections in the Ministry of Health Hospitals in Sharjah, UAE: 2-year retrospective study

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**Background:** In United Arab Emirates (UAE) having four and a half million population, Sharjah boasts the third most populated emirate having 600,000 people [1]. Approximately 80% of the population is expatriates coming from countries where parasitic infections are endemic. Many of them find suitable jobs in various food manufacturing industries, hotels, restaurants and fast food outlets. They also work as food handlers, housemaids and baby sitters. Thus, possible transmission can occur between the immigrants workforce and native emirati population in the community. The present study investigates the prevalence of the intestinal parasitic infections in Ministry of Health hospitals in Sharjah emirate of United Arab Emirates.

**Methods:** Retrospective laboratory data analysis of ten thousand five hundred fourteen fecal specimens in five different Ministry of Health hospitals within the emirate of Sharjah, was carried out between January 2007 and December 2008. The stool specimens were examined using different microbiological analysis including direct and stool concentration techniques.

**Results:** During the study period, eight hundred fourteen stool specimens were found to be positive for intestinal parasites. Of this 814 positive specimens, five hundred ninety three (73%) were from local emirati people and rest 27% belongs to the expatriates. There was a higher rate of protozoal infections (92.2%) than the helminths infection (7.8%). *Entamoeba histolytica* (71.8%) and *Giardia lamblia* (17.5%) were the commonest intestinal parasites identified. Among the helminths, *Ancylostoma duodenale* and *Ascaris lumbricoides* were the common ones. The rate of protozoal infection in native emirati population was 71% (577). On the other hand, the helminth's infestations were more common among the expatriates (6%).

**Conclusion:** Possibly the most surprising and unanticipated finding was the far greater prevalence of intestinal parasitic infections among the native emirati population (73%) compared with the expatriates (27%), and this may be attributable to better health seeking attitude and more accessibility of native emirati people to government hospitals than the expatriates. The high prevalence rate among

the local people indicates that there is a high transmission rate in the community. The existing screening methods especially for food handlers and housemaids need to be improved and strengthened.

## Reference

[1]. UAE Population. (2009, April 28). Retrieved April 28, 2009, from <http://www.asiarooms.com/7travel-guide/7united-arab-emirates/7uae-overview/7uaeapopulation.html>.

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#### A study of medically important fish - transmitted parasites in Alexandria

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**Background:** Seafood has traditionally been a popular part of the diet in many parts of the world. However, salt and freshwater fish can serve as sources of parasitic infections to man. This study aimed to identify parasites of medical importance in the commonly consumed fish in Alexandria namely, *Tilapia zilli*, *Mugil cephalus*, *Clarias gariepinus*, *Brycinus nurse* and *Atherina boyeri*, and to study their infectivity to laboratory mice.

**Methods:** The study was applied on 300 fish during both cold and hot months throughout a year starting from November 2006 to October 2007. They were examined for the presence of parasites in their intestines and flesh, using modified Ziehl-Neelsen, safranin and modified trichrome stains. Furthermore, fish flesh was screened for metacercariae of Heterophyidae, which were then isolated by in vitro pepsin-hydrochloric acid digestion. Infection of laboratory mice with the detected parasitic protozoa and the encysted metacercariae was done to study their infectivity and their pathological outcome. The obtained heterophyids were examined after clearance in lactophenol and staining with carmine stain.

**Results:** Results showed that the following parasites were detected; *Microsporidia*, *Cryptosporidia* and *Cyclospora* in fish intestine, and metacercaria of *Pygidiopsis genata* in fish flesh. *Tilapia zilli* was the most infected fish, followed by *Clarias gariepinus*, then, *Atherina boyeri* and *Brycinus nurse*. The least infected fish was *Mugil cephalus*. All the detected parasites were found to be infective to experimental mice as proved by observation of the previously mentioned protozoa and heterophyid eggs in their stool samples, and also by the histopathological changes in their intestinal sections.

**Conclusion:** Thus, the present work proved that the studied fish harboured infective parasites in their flesh and intestine that can have great impact on the human health.

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