Letters to the Editor

References


Sir,

The current position regarding Alzheimer's disease remains extremely complex and to say the least controversial. Among the controversies is the possible role for aluminium. The overwhelming debate appears to be that only 10% or less of the patients can be accounted for on a genetic basis and the remaining 90%, therefore, involve some environmental or other factors. Aluminium is implicated as one of the potential environmental factors. I do not think anybody would dispute the statement that a disturbance in amyloid precursor protein is a fundamental problem in the aetiological mechanisms of Alzheimer's disease. It is possible, therefore, that a type of interaction could be along the lines which is proposed by Drs Delamarche and Wion.

M. R. WILLS MD PhD FRCP FRCPaed
University of Virginia Health Sciences Center,
Box 168, Charlottesville,
Virginia 22908, USA

Saudi Medical Journal 1993; 14(5): 483

Relationship of Intestinal Parasites in Urban Communities in Abha to Socioenvironmental Factors

Sir,

I write with reference to the two articles published on this subject in your journal. The first (Saudi Med J 1989; 10(6): 477–480) showed two intestinal pathogens Giardia lamblia and Entamoeba histolytica in the community with a prevalence of 3.6% and 1.7% respectively. The second, at King Abdulaziz University Hospital, Jeddah (Saudi Med J 1989; 10(3): 193–197) showed G. lamblia as 7.7% and 8.6% while E. histolytica accounted for 13.8% and 11.8% of the total infections in Saudis and non-Saudis respectively. Males and females of both groups showed similar prevalence rates.

Intestinal parasites still constitute a major health problem worldwide and it is estimated that about a billion people mostly in developing countries are affected.1 Community studies show that a higher prevalence of intestinal parasites correlates with low socioeconomic status and with a low educational level.

The increased prevalence of parasitic infections contradicts the expectation for the improvement in the status of living, hygiene and sanitation in Saudi Arabia. Most of the manpower involved in food handling at houses and restaurants comes from low socioeconomic classes from countries with a high prevalence of parasitic infection. Community medicine workers have to deal with this problem in order to protect public health.

Reports and evidence suggest that intestinal parasites like G. lamblia (protozoal infections) evoke both humoral and cell-mediated immune responses.5,6 Epidemiological data in humans and experimental evidence in animals suggest that protective immunity occurs following infection with G. lamblia.3

It was first suggested in 1926 by Brumpt that E. histolytica was a complex of E. dysenteriae causing dysentery, and E. dispers which was non-pathogenic.6 Amoebic lesions may mimic carcinomas of the anus, vulva, penis and cervix. This parallels the ability of an amoebic granuloma to resemble scirrhous carcinoma of the large bowel. So apparent malignancy may occur at these sites which can be colonized by amoebae.7

DR MD. REZAUL MALIK MB BS DCM MS
Darnangah Kumro,
87351, Kashan,
Esfahan, Iran

References


Sir,

Referring to Dr Malik's comments on our paper (Saudi Med J 1989; 10: 477–480) we wish to clarify that although the differences in prevalence of each intestinal parasite according to various levels of education and income were not statistically significant, such differences were significant (p < 0.05) when all parasites were combined (last column in Tables 1 and 2 in our paper). As mentioned this relationship was expected and logical.

Dr Malik's statement that 'the increased prevalence of parasitic infection contradicts the expectation of the improvement in the status of living, hygiene and sanitation in Saudi Arabia' should be regarded cautiously. To make such a conclusion about increase in prevalence one should compare prevalence of intestinal parasites in Saudi Arabia with that in other countries, and also examine the trend of prevalence in the Kingdom over time. Further, for proper judgement, prevalence figures should be based on the experience of the general population rather than of very selected groups such as hospital patients or expatriate food handlers in whom the prevalence is expectedly high.

Our figures for prevalence of intestinal parasites come from two general population urban sectors in Abha, and are considered very low compared with prevalence in other countries, such as for example Yemen where 53% of the population were infected1 and Bangladesh where 80% of the population have one or more parasites.2 Further, our other study including schoolchildren in Abha also showed lower prevalence than among children in neighbouring countries such as Egypt, Iran
and Iraq. A study in rural communities near Abha naturally showed a prevalence of intestinal parasites higher than that in the urban communities, but the figures are still lower than those reported from other countries mentioned above.

As to the trend in prevalence of intestinal parasites in the Kingdom over time, we are not aware of any community-based study to illustrate that aspect. The study cited by Dr Malik (Saudi Med J 1989; 10: 193-197) reported an increase in prevalence over a 5-year period, but this study was carried out on a highly selected group of patients attending King Abdul Aziz Hospital among whom the prevalence is expected to be high. It was mentioned in that study that the increase over time was probably due to the importation of the disease by expatriates who markedly increased in number in recent years, and among whom infection with intestinal parasites was much higher than among the Saudis and was consistent with the prevalence in their native countries.

Finally, we agree on Dr Malik's other comments regarding immunity after giardiasis infection and possible carcinogenicity of amebiasis which he adequately documented.

H. A. H. ABU-ZEID MB BCH DR PH
Professor, Department of Family and Community Medicine,
College of Medicine,
King Saud University, Abha Branch,
PO Box 641, Abha, Saudi Arabia
Saudi Medical Journal 1993; 14(5): 483-484

References