

CRYPTOSPORIDIOSIS IN KARACHI

Pages with reference to book, From 174 To 174

Madam, Cryptosporidium, a protozoan parasite has recently been identified as a causative agent of diarrhoea in India¹, Bangladesh², Sri Lanka³ and Pakistan⁴. In order to determine the frequency of diarrhoea due to this protozoan in our patients, we collected 550 faecal samples between January 1989 to July 1991 from different hospitals in Karachi. A modified Kinyoun acid fast stain was used to stain the parasite. Faecal smears were air dried and fixed in methanol for 3 minutes, stained with basic fuchsin for 2 minutes⁵, washed with tap water, decolorized with 1% sulphuric acid for 1 minute and counter stained with 0.5% malachite green for 30 seconds. On examination under high power and oil immersion the cryptosporidium oocyst stained bright red against a green background. Of 550 faecal samples examined, 190 (35.6%) were positive for cryptosporidium. The number of oocyst per high power field was high (> 10) in majority of the cases indicating that this protozoal infestation is an important cause of diarrhoea in our country. It is possible that a large number of cases are not detected as the symptoms of cryptosporidiosis are similar to any other gastrointestinal infections and faecal samples are not routinely screened for this parasite. Lack of experience, inadequate preparation of slide or improper staining further contribute to the low yield. As the number of cases reported is high further clinical study is being conducted and the effect of spiramycin/roviromycin in the treatment of cryptosporidiosis is being investigated.

ACKNOWLEDGEMENT

The authors are grateful to Dr. Javed Kazi, Pathologist, Liaquat National Hospital for his help in collection of faecal samples from diarrhoeal patients.

Rakhshanda Baqai, Saleem Hafiz and Sarwar J. Zuberi
PMRC Research Centre, Jinnah Postgraduate Medical Centre, Karachi.

REFERENCES

1. Saraswathi, K., Pandis, D.V., Deodhar, L.P. and Bichile, U.S. Prevalence of cryptosporidium in patient with diarrhoea in Bombay. Indian J. Med. Res., 1988;87:221-24.
2. Shahid, N.S., Rahman, A.S., Anderson, B.C., Mats, U. and Sanyal, S.C. Cryptosporidiosis in Bangladesh. Br.Med.J., 1985;290:114-15
3. Perara, S. Cryptosporidium associated childhood diarrhoea in Sri Lanka. A preliminary study. Ceylon Med., 1988;33:101-4.
4. Anwar, F., Khan, L.A., Munir, M.A., Vousuf, M.O. and Aaghar, H. Prevalence of cryptosporidium in Rawalpindi/Islamabad. A comparison of saline, iodine and stained preparation. J.Pak.Med. Assoc., 1990;40:219-21.
5. Lennette, E.H., Balows, A., Hausler, W.J. and Traut, J.P. Manual of clinical microbiology. 3rd ed. Washington, Am.Soc. Microbiology, 1980. p. 1019.