SVlQIaR!': MJ) COBCLVSIOR

At present the definition of campylobacter relies on only a few characteristics, in particular G + C .01 % content of ORA, their spiral appearance and respiratory requireaents. In 1973, the genus and species of campylobacter were proposed. The taxonomy of these organisms has undergone several recent changes, which is a frequent cause of confusion.

campylobacter jejuni has been recognised as a common bacterial cause of diarrhoea for a few years and a very important cause of food poisoning. The recognition of campylobacter has been slow due to the difficulty in isolating the organism from stools. This has been attributed to its unusual growth requirements.

preliminary evidence shows a great diversity of serotypes among c. jejuni organisms, perhaps paralleling the diversity within salmonella enteritidis. No single serotyping scheme is widely accepted as yet.

'rhese organisms have been found in a wide variety of animals, including cattle, sheep, gulls, monkeys, pigs and domestic pets such as cats and dogs. campylobacteriosis may be acquired by contact with animals or by in~estiOftof contaminated water or foods, in particular poultry, unp&steurised milk and red meat.

our study included 148 patients attending Benha university Hospital during the period from the first of May to the end of September 1987 complaining of diarrhoea. Their age ranged from below one year to 61 years with a mean of 7.636 years. The sample included 89 males an 59 females with a ratio of 1.5/1.

Most cases 94 (63.513%) had the diarrhoeal episode for 1-5 days but, the mean duration of i11n.ss before seeking medical advice was 5.459 days. 58 (39.189 %) of cases had 6 - 10 motions during the previous 24 h and the mean number of motions was 9.952. 89 (60.135 %) of patients suffered from vometing. 123 (83.108 %) complained

of abdominal pair•• 98 (66.216 %) had a rise of temperature. 51 (34.459 %) received treatment before we obtain their spectaens.

A microscopic examination of stools for blood, leucocytes and parasites was done. Blood was seen in 47 (31.756 %) samples. Leucocytes were detected in 112 (75.675 %) samples. The following parasites were detected: Entamoeba histolytica 15 (10.135 %) cases, Gardia lamblia 6 (4.054 %) cases, Ascaris ova 20 (13.513 %) cases, Bilharzia Mansoni ova two (1.351 %), Trichuris trichura 7 (4.729 %) cases, Strongyloids stercoralis one (0.675 %) cases and H~ol.pis Nana ova one (0.676 %) of cases.

Then, the stools were immediately directly plated on campylobacter jejuni selective medium, Preston medium. The medium is composed of campylobacter Agar Base, 5 % lysed horse R.B.C's. and Preston campylobacter Selective Supplement. This supplement is formulated as : Polymyxin -B 2500 I.U., Rifampicin 5 mg, Trimethoprim lactate

5 mg and actidione 5 mg. This formula is sufficient for 500 ml campylobacter agar.

Cultures were incubated in a Gas-pak system without catalyst at 43·C for 48 h. under these conditions Preston medium had yielded: 5 isolates of C. jejuni, one strain salmonella (para B) , 6 yeast like fungi, one strain coagulase negative staphylococci and 87 strains of B.coli. 48 samples showed no growth.

The rate of isolation of C. jejuni, in this study, reached 3.38 % (5 cases). This rate may be understood within an ecosystem for our locality in· order to know the prevalence of intestinal pathogens, to tallow the dynamics of intestinal infection and the pathogenesis of diarrhoea. We can conclude the importance of isolating C. jejuni from fecal speci-mensin order not to miss an important pathogen in case of diarhea.

Fecal cultures had the highest yields of

C. jejuni when o~,tainedfrom patients within 7 days of illness. Isolation rates were highest for those specimens that were watery, had gross or occult blood or contained leucocytes. No relationship of Campylobacter infection to occupation per se has been shown.

The majority of strains were found to be highly sensitive to nitrofurantoin, doxycycline, gentamycin and nalidixic acid. They showed intermediate sensitivity to neomycin and were resistant to : colistin, cefoxitin, cefaloridine and rifampicin. Antibiotic treatment is recommended to reduce the chance of cross infection and to diminish the symptoms and shorten the period of diarrhoea.

Our study shows that Campylobacter is an important pathogen specially in cases of infantile' diarrhoea which may be misdiagnosed due to unawareness of clinicians and microbiological laboratories of the importance and methods of isolation of this organism.