

Skirrow M B. *Campylobacter* enteritis: a "new" disease. *Brit. Med. J.* 2:9-11, 1977.
[Public Health Laboratory, Worcester Royal Infirmary, England]

By the application of new selective culture methods, campylobacters were isolated from the faeces of 57 (7.1 percent) of 803 unselected patients with acute diarrhoea but from none of 194 without diarrhoea. Serological evidence of infection was found in 31 of 38 of the campylobacter-positive patients. These findings suggest that campylobacters are a hitherto unrecognised and common cause of acute diarrhoea. [The SC[®] indicates that this paper has been cited in over 710 publications.]

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One Sunday morning in 1975, I was called out to look at a blood culture from a one-month-old boy admitted to Worcester Royal Infirmary, who was suffering from a fever of undetermined origin. The culture contained many highly motile "spirilla"—a bizarre picture that I had never seen before. The organism was later identified as a *Campylobacter jejuni*, a genus of bacteria formerly classified as microaerophilic vibrios and at that time virtually unknown to medical microbiologists.¹ However, it was familiar to veterinarians as a cause of "vibriotic" abortion in sheep and cattle.

Fascination with this strange organism led me to papers by J.P. Butzler and co-authors in Belgium,² who claimed to have isolated campylobacters from the faeces of 5 percent of children with diarrhoea by the application of a special selective culture technique used in veterinary laboratories. I viewed such startling results with some scepticism, as no

further papers had appeared in the three intervening years (a mystery to this day). Nevertheless, I set out to see if their results could be reproduced, realising the importance of any organism that might be causing 5 percent of diarrhoea in children (and especially bearing in mind that in those days an infective cause for diarrhoea could be found in only about 10 percent of patients). As it turned out, the figure of 5 percent was conservative, and adults were infected at least as often as children; the average isolation rate in my series of patients was 7.1 percent.

Thus, a "new" disease was launched on the medical world. Since then, it has become clear that in most developed countries campylobacters (*C. jejuni* and *C. coli*) are the most common cause of acute bacterial diarrhoea and that the sources of infection are animals via food, milk, and water. In developing countries campylobacters are a contributory factor in the enormous burden of infant diarrhoea. The importance of these organisms is such that four international workshops devoted entirely to campylobacter infections have been held during the past seven years.

It is easy to see, therefore, why this paper has been cited so often. It was the first paper to draw general attention to the infection (it also described a new selective culture medium), although much of the original thinking and pioneering work was done by Elizabeth O. King in Atlanta¹ and the Belgian team in Brussels;² they deserve a major part of the credit for this discovery. It is sad that King did not live to see the full fruition of her work.

[See references 3 and 4 for recent work in this field.]

1. King E O. Human infections with *Vibrio fetus* and a closely related vibrio. *J. Infect. Dis.* 101:119-28, 1957. (Cited 200 times.)
2. Butzler J P, Dekeyser P, Detrain M & Dehaen F. Related vibrio in stools. *J. Pediatrics* 82:493-5, 1973. (Cited 195 times.)
3. Blaser M J, Taylor D N & Feldman R A. Epidemiology of *Campylobacter jejuni* infections. *Epidemiologic Rev.* 5:157-76, 1983.
4. Butzler J-P, ed. *Campylobacter infection in man and animals*. Boca Raton, FL: CRC Press, 1984. 246 p.