

Isolation of *Campylobacter lari* from pediatric patients in King Khalid University Hospital

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ABSTRACT

Four cases from whom *Campylobacter lari* were isolated from blood and/or stool specimens are reported. All the patients aged less than 3 years, all presented with diarrhea, which was bloody in one case. None of the patients was immunocompromised. Isolation of *C.lari* from the blood of such patients is not commonly encountered. The methods of isolation and identification of *C.lari* are presented with a brief review of the literature.

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S kirrow and Benjamin were the first workers to report in 1980, the frequent isolation of *Campylobacter laridis* from wild seagulls of the genus *larus*¹ which has been renamed *C.lari*. The organism was also isolated from other animals and man by the same authors¹ although less frequently. Deoxyribonucleic acid (DNA) analysis studies showed that *C.lari* belongs to the group of nalidixic acid resistant thermophilic *campylobacter* species (NARTC)^{2,3} The first report of its potential pathogenicity for humans came in 1984 when Nachamkin et al⁴ reported the first case of *C.lari* bacteremia from an immuno-compromised patient. We report the isolation of *C.lari* from the blood and/or stool of four immunocompetent children who presented with diarrhea. Isolation of *C.lari* from blood of non-immunocompromised patients is not a common finding.⁴ *C.lari* has been reported very rarely as a cause of diarrhea in humans.² Medical literature on the epidemiological and pathogenesis of *C.lari* in the Middle Eastern countries is lacking. To the best of our knowledge this is the first report on *C.lari* from the Middle East in general and Saudi Arabia in particular.

Case Reports

Case no. 1 A two day old baby girl presented at the Neonatal Intensive Care Unit (NICU) at King Khalid University Hospital with bloody diarrhea. She was born at full term to a 32-year old

Bangladeshi lady. The birth weight was 3.320 kg. Pregnancy and delivery were uneventful. Physical examination was unremarkable. A full septic work-up was carried out on admission which included blood and stool cultures. Radiography revealed no abnormality. She was empirically started on ampicillin and gentamicin. Next day she was well and had no more bloody diarrhea. Seventy-two hours later she was discharged from the NICU. On day 7 the blood culture, collected on admission, was positive. Gram stain of the isolate showed a gram negative curved bacillus which was later identified as *C.lari*. Stool culture revealed the same organism. Accordingly, the patient was readmitted to the ward and had a full septic work-up including repeat stool and blood cultures and was put on gentamicin therapy for 10 days. During this period she remained symptom-free. Her mother's stool and blood cultures were negative for *C.lari*. Repeated stool and blood cultures were negative. The patient was discharged home in good health.

Case no. 2 An 18-month old Saudi boy presented at the Pediatric Clinic at King Khalid University Hospital with recurrent episodes of diarrhea for 2 weeks. Details of patient's history were not relevant except for contacts with pet birds at home. Physical examination showed no abnormality and laboratory investigations were unremarkable. A stool specimen was positive for *C.lari*. The blood culture was negative. No

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