Abstract:

Nine Klebsiella pneumoniae isolates, six from blood and three from cerebrospinal fluid of newborn babies at Kenyatta National Hospital, Nairobi, Kenya, were analyzed for the mechanism of cephalosporin resistance. By using pulsed-field gel electrophoresis of XbaI-digested chromosomal DNA, all the nine isolates were found to be clonal. PCR and direct sequencing revealed a novel extended-spectrum b-lactamase, which we designated CTX-M-12. It has a more potent hydrolytic activity against cefotaxime than against ceftazidime and a pI of 9.0 and is encoded on a large self-transferable ca. 160-kbp plasmid.