The main pathogenic bacteria distribution and drug resistance analysis of common surgical infection in general surgery

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Objective: To retrospectively investigate the distribution and drug resistance of the main pathogens of common surgical infections in general surgery and to provide references for early and reasonable empirical treatment.

Methods: The pathogens of the infected tissues, sputum, peritoneal drainage and puncture fluid were collected and identified in our hospital from January 2012 to January 2016. The pathogen type, distribution, and drug resistance were analyzed.

Results: A total of 628 strains of pathogens were co-cultured in 397 infected patients. Among the 323 strains of pathogens, *Escherichia coli* and *Klebsiella pneumoniae* were 27.55% and 19.20% respectively. The number of pathogens isolated from the sputum samples was 213, and were *Klebsiella pneumoniae, Pseudomonas aeruginosa*, and *Acinetobacter baumannii* predominantly, accounting for 44.60%, 17.37%, and 13.62% respectively. 92 strains of pathogens were isolated from intraperitoneal drainage and puncture fluid samples. *Escherichia coli* and *Klebsiella pneumoniae* were mainly accounted for 45.65% and 10.87% respectively. *Klebsiella pneumoniae, Escherichia coli* are highly sensitive to imipenem and meropenem. *Enterococcus faecalis* is resistant to vancomycin. *Pseudomonas aeruginosa* in addition to cefazolin and other antibacterial drugs other than ceftriaxone are more sensitive, and *Acinetobacter baumannii* was with highly multiple drug resistance.

Conclusions: Patients with common surgical infection should be mainly Gram-negative bacilli, which are sensitive to carbapenem antibiotics and should be promptly inspected and selected according to the distribution of pathogens and drug susceptibility.

Biography
Zhang Youjiang is associate chief technician of Chinese people’s liberation army general hospital. His research focus on clinical microbiological and immunological testing over 30 years.

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