

Resistance patterns of microbes isolated from gastrointestinal tract

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20333055&lokasi=lokal>

Abstrak

Latar belakang: Infeksi saluran cerna dengan manifestasi klinis berupa diare merupakan penyakit infeksi dengan kesakitan dan kematian yang tinggi terutama di negara-negara yang sedang berkembang. Diare menimbulkan kematian terutama pada bayi baru lahir di bawah 1 tahun. Penanganan telah ditingkatkan secara terus menerus, namun demikian kemajuan dalam diagnosis maupun pengobatan tidak terjangkau oleh negara-negara yang sedang berkembang. Salah satu penyebab infeksi saluran cerna adalah bakteri. Oleh karenanya dengan mengetahui bakteri penyebab serta pola resistensi bakteri terhadap antibiotik dapat menunjang penatalaksanaan penyakit ini. Studi ini dilakukan untuk mengetahui berbagai jenis mikroba yang diisolasi dari saluran cerna serta pola resistensinya terhadap beberapa antibiotik.

Metode: Spesimen berupa tinja, usap dubur atau anus yang diterima oleh Laboratorium Mikrobiologi FKUI selama 2005- 2008. Isolasi, identifikasi kepekaan dan uji antibiotik dikerjakan sesuai prosedur standar yang berlaku. Interpretasi hasil uji kepekaan menggunakan panduan NCCLS/CLSI. Data dianalisis menggunakan WHOnet versi 5.3.

Hasil: Diperoleh 28 isolat *Escherichia coli* patogen, 1 isolat *Salmonella paratyphi A*, dan 4 isolat ragi yang diisolasi dari tinja dan swab dubur penderita. Walaupun *Escherichia coli* patogen masih peka terhadap beberapa antibiotik, namun kepekaannya menurun terhadap amoxicillin, sulbenicillin, ticarcillin dan trimethoprim/rulfamethoxazole.

Kesimpulan: *Escherichia coli* patogen merupakan bakteri terbanyak yang berhasil diisolasi dari tinja/usap dubur. Bakteri ini telah menunjukkan penurunan kepekaan terhadap beberapa antibiotik yang sering digunakan untuk mengobati infeksi saluran cerna. (Med J Indones 2011; 20:105-8).

<hr>

Abstract

Background: Digestive tract infection with clinical manifestation of diarrhea is an infectious disease that has the highest morbidity and mortality rate, especially in developing countries. Diarrhea causes mortality mostly in infants under one year old. Improvement in management is done continuously, but advances in diagnosis and therapy cannot be reached by developing countries. One of the etiological agents causing infection of digestive tract is bacteria. Therefore, knowledge of bacteria that cause gastrointestinal infection and their resistance patterns may support the management of this disease. The aim of this study was to examine microbes that were isolated from the digestive tract and their resistance patterns against antibiotics. Methods: Samples (stool, rectal/anal swab) were collected from the Clinical Microbiology Laboratory, FKUI during 2005-2008. Isolation, identification and sensitivity test were conducted according to standard laboratory procedures. Interpretation of sensitivity test was done according to NCCLS/CLSI guidance. Data was analyzed using WHOnet version 5.3.

Results: We found 28 isolates of pathogenic *Escherichia coli*, 1 isolate of *S. paratyphi A* and 4 isolates of yeasts. Pathogenic *Escherichia coli* were still sensitive against some antibiotics, but the sensitivity was reduced against amoxicillin, sulbenicillin, ticarcillin and trimethoprim/sulfamethoxazole.

Conclusion: The most predominant gastrointestinal tract infection causing microbes was pathogenic *Escherichia coli*. These bacteria showed decrease sensitivity against some antibiotics commonly used to treat patients with gastrointestinal tract infection. (Med J Indones 2011; 20:105-8)