

*Chryseobacterium Indologenes****Chryseobacterium indologenes* Isolated from Clinical Specimens**

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Chryseobacterium indologenes is a nonfastidious, oxidase-positive, gram-negative rod that does not ferment glucose. It is known to be associated with a variety of clinical infections. We report six cases of *C. indologenes* isolated from clinical specimens, which were seen at our institution over a 2-year period. These organisms were recovered from blood, pleural fluid, peritoneal fluid, bile, endotracheal aspirate, and sputum. We described clinical characteristics, treatment outcome, microbiological characteristics, and in vitro antibiotic susceptibility test.

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Key words : *Chryseobacterium indologenes*, Blood, Pleural fluid, Bile, Peritoneal fluid, Sputum, Endotracheal aspirate

1994 Vandamme *Flavobacterium*
가 *Chryseobacterium*
, *C. meningosepticum*, *C. indologenes*, *C.*
gleum, *C. balustinum*, *C. indoltheticum*, *C. scophthalmum*
6 [1]. *C. indologenes*
C. gleum *Flavobacterium* CDC group IIb
1983 Yabuuchi *Flavobacterium*
indologenes, 1994
Chryseobacterium [2]. *C.*
indologenes, oxidase, , ,
, ,
[3]. *C. indologenes*
, , , (indwelling device)
[4-7].
C.
2
*indologenes*가 6

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(135-710)

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Table 1. Clinical characteristics, treatment, and outcome of infections by *C. indologenes*

Patient No.	Age/sex	Underlying diseases	Other associated condition	Clinical syndrome	Site of <i>C. indologenes</i> isolation	Other bacterial isolate(s)	Antibiotic Treatment*		Outcome
							Before	After	
1	25/M	Aortic mycotic aneurysm	Chest tube drainage	Community-acquired chronic pleuritis	Pleural fluid	<i>S. aureus</i>	Gentamicin Ceftriaxone	Vancomycin	R
2	63/M	Gastric adenocarcinoma DM, Uremia	None	Nosocomial Primary bacteremia	Blood	None	Ciprofloxacin Metronidazole	Ciprofloxacin Metronidazole	R
3	57/F	Endometrial adenocarcinoma DM, LC	None	Nosocomial spontaneous bacterial peritonitis	Peritoneal fluid	None	Cefuroxime	Cefotaxime	R
4	53/F	Breast cancer SVC syndrome	PTBD	Nosocomial cholangitis	Bile	<i>E. faecalis</i> <i>C. freundii</i>	Cefazolin Ciprofloxacin	Ciprofloxacin Ampicillin Gentamicin	Died
5	1/F	Chronic SDH Brain abscess	Ventilator	Nosocomial pneumonia	Endotracheal aspiration	<i>S. aureus</i>	Ceftriaxone Vancomycin	Vancomycin	R
6	16/F	Lung cancer	None	Nosocomial pneumonia	Sputum	None	Ceftazidime Tobramycin Clindamycin	Ticacillin/ clavulanic acid	R

*Antibiotics used before and after the report of susceptibility test.

Abbreviations: R, recovered; DM, diabetes mellitus; LC, liver cirrhosis; SVC, superior vena cava; PTBD, percutaneous transhepatic biliary drainage; SDH, subdural hemorrhage.

1996 1 1998 9
*indologenes*가 6
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 , (, *C. indologenes*가
 , , 72
 가 . *C. indologenes*가
 Table 1
 . 6
 4 , 가 가 2 .
 5 , 5
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가 2
 1 3 Trimethoprim/sulfamethoxazole 가
 3 6
 5 (Table 1 1, 2, 4, 5, 6) 가
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 , *C. indologenes* 가
C. indologenes *Chryseobacterium*
 2 (: 2, 4)
 :24
 1-2 mm 가
 oxidase [3,5]. *C. indologenes* 가
Flavobacterium CDC group IIb *Flavobacterium*
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 가
 Microscan Walkaway system(Dade Behring Inc., West Sacramento, CA, U.S.A) , API 20NE system 가
 bioMerieux, Hazelwood, MO, U.S.A) VITEK GNI system(bioMerieux, Hazelwood, MO, U.S.A) 가
C. indologenes . 17 Hseuh [5] *C. indologenes*
 Table 2. 가
 Aztreonam 2(Table 2 Isolate 2)
 , 1 cephalosporin , 가
 1

Table 2. Antimicrobial susceptibility results of *Chryseobacterium indologenes* isolated from patients

Antimicrobial agents	Isolates					
	1	2	3	4	5	6
Amikacin	R	S	R	R	R	R
Tobramycin	R	S	R	R	R	R
Gentamicin	R	S	R	R	R	R
Cefazolin	S	R	R	R	R	R
Cephalothin	S	R	R	R	R	R
Cefoxitin	S	S	I	R	R	S
Cefuroxime	S	S	R	R	R	R
Cefotaxime	S	S	R	S	R	S
Ceftazidime	S	S	R	R	R	R
Ceftriaxone	S	S	R	I	R	R
Ceftizoxime	S	S	R	S	R	R
Ticarcillin	S	S	R	S	R	R
Ticarcillin/clavulanate	S	S	R	S	R	R
Aztreonam	R	S	R	R	R	R
Imipenem	S	S	R	S	R	R
Ciprofloxacin	S	S	R	S	R	S
Trimethoprim/sulfamethoxazole	S	S	S	S	S	S

Abbreviations: R, resistant; S, susceptible; I, intermediate

, aminoglycoside

(2)

(tracheobronchial)
 [8].
 (5) *Staphylococcus aureus*
 가 . *C.*
indologenes
 [5,7],
 3 가
C. indologenes
*C. indologenes*가
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*C. indologenes*가 3
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indologenes 가
 , *C. indologenes*가 6
*C. indologenes*가 가
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 가 . *C. indologenes*
 . *C. indologenes*
 penicillin, aztreonam, 1, 2
 cephalosporin , 3
 cephalosporin, aminoglycoside, imipenem, quinolone,
 tetracycline
 [9-11].
 trimethoprim/sulfamethoxazole
 . *C. indologenes*
 가
 [6]. , ,
 , 가
 , penicillin,
 cephalosporin, aminoglycoside
 가 가
*C. indologenes*가 가
C. indologenes

C. indologenes oxidase ,
 가
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C. indologenes 6
 ,
 1. Vandamme P, Bernardet JF, Segers P, Kersters K, Holmes B. *New perspectives in the classification of the Flavobacteria: Description of Chryseobacterium gen. nov., Bergeyella gen. nov., and Empedobacter nom. rev.* *Int J Syst Bacteriol* 1994;44:827-31.
 2. Yabuuchi E, Kaneko T, Yano I, Moss CW, Miyoshi N. *Sphingobacterium gen. nov., Sphingobacterium spiritivorum comb. nov., Sphingobacterium multivorum comb. nov., Sphingobacterium mizutae sp. nov., and Flavobacterium indologenes sp. nov.: glucose-nonfermenting, gram-negative rods in CDC group IIk-s and IIb.* *Int J Syst Bacteriol* 1983;33:580-98.

