


Klebsiella

name	Klebsiella spp.
family	Enterobacteriaceae
genus	Klebsiella
	
<i>Klebsiella pneumoniae</i> on Endo agar	
Morphology	G– rods
Relation to oxygen	Facultative anaerobe
Cultivation	Blood agar, Endo agar
Antigens	Capsule antigens
Transmission	Fecal-oral, contact, by air (respiratory droplets) ^[1]
Occurrence	Gastrointestinal and respiratory tract, soil, water
Diseases	Urinary tract infections, pneumonia, sepsis, neonatal meningitis and sepsis
Diagnostics	Cultivation
Therapy	2nd and 3rd generation cephalosporins, carbapenems, fluoroquinolones

The *Klebsiella* species are **encapsulated gram-negative rods**. Bacteria of this genus are part of the microbial flora of the GIT and respiratory system. In the external environment, they are found in soil and water. These are facultatively pathogenic bacteria. The most important species is ***Klebsiella pneumoniae*** and other members include *Klebsiella oxytoca*.

Klebsiellas grow on blood agar as white colonies, allowing differentiation from *E. coli*, when cultivated on Endo agar: they look like strawberry ice cream. Encapsulating antigens are a major virulence factor. Bacteria of this genus most often cause **urinary tract infections and pneumonias**, they can also cause sepsis, especially in ICU patients as **nosocomial infections**. *Klebsiella pneumoniae* are mostly lobar, often occurring in debilitated people and alcoholics. In neonates, they cause purulent meningitis and sepsis. Transmission is fecal-oral, by contact, and by air (respiratory droplets).

2nd and 3rd generation cephalosporins are used in therapy and urinary tract infections are treated with nitrofurantoin. Nosocomial strains are sensitive to carbapenems.^{[1][2][3]}

References

Related Articles

- Pneumonia

External links

- Klebsiella
- Klebsiella pneumoniae

References

- BENEŠ, Jiří. *Infekční lékařství*. 1. vydání. Praha : Galén, c2009. s. 240-241. ISBN 978-80-7262-644-1.
- ↑ *VOTAVA, Miroslav. *Lékařská mikrobiologie speciální*. 1. vydání. Brno : Neptun, 2003. s. 67-68. ISBN 80-902896-6-5.
- ↑ BEDNÁŘ, Marek. *Lékařská mikrobiologie : bakteriologie, virologie, parazitologie*. 1. vydání. Praha : Marvil, 1996. s. 265-266. ISBN 80-238-0297-6.

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2. VOTAVA, Miroslav. *Lékařská mikrobiologie speciální*. 1. vydání. Brno : Neptun, 2003. s. 67-68. ISBN 80-902896-6-5.
3. BEDNÁŘ, Marek. *Lékařská mikrobiologie : bakteriologie, virologie, parazitologie*. 1. vydání. Praha : Marvil, 1996. s. 265-266. ISBN 80-238-0297-6.