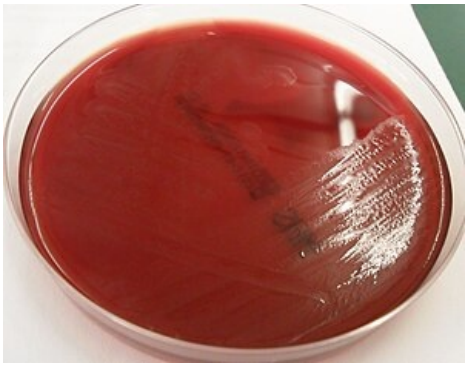
Clostridium

Clostridium spp.
Clostridiaceace
Clostridium



Clostridium Perfringens

Morphology	G + sticks
Relation to oxygen	anaerobic
Occurrence	soil, mud, ponds, rivers and the coast, dust, vegetation, many species are commensal in the intestines of vertebrates and humans
Disease	neurointoxication, necrotizing toxin infections, intestinal disease processes
Therapy	beta lactam ATB (penicillin G), cephalosporins (cefoxitin), deoxylinecomycin, clindamycin, vancomycin, tetracyclines, erythromycin, chloramphenicol, metronidazole

Template:Infobox - bacteria

An important group of bacteria, whose common characteristics are sensitivity to oxygen and the ability to sporulate. Developmentally, it belongs to a very old group of bacteria with numerous links to archaebacteria.

- **Morphology:** G + rods, variously long and wide, mostly straight.
- **Occurence:** Widespread in nature, occur in soil, mud (ponds, rivers, sea coast), dust, vegetation. Many species saprophyte in the gut of vertebrates and humans.

Disease

Clostridia cause 3 types of disease:

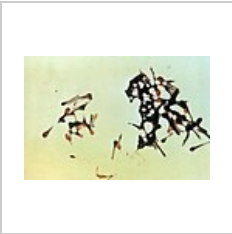
- Neurointoxcation (*C. tetani, C. botulinum*).
- Necrotizing toxiinfection of soft tissues and intra-abdominal organs containing muscle (histotoxic clostridia).
- Intestinal processes (necrotizing enterocolitis , enterotoxemia, pseudomembranous enterocolitis and diarrhea).

Shortcuts

- *Clostridium botulinum*
- *Clostridium difficile*
- *Clostridium novyi*
- *Clostridium tetani*
- *Clostridium perfringens*
- *Clostridium septicum*
- *Clostridium ulcerans*

Photo gallery

Clostridium Botulinum



Clostridium Tetani

Links

Related articles

- Pseudomembranous enterocolitis
- Botulism
- Tetanus
- Enterotoxins
- Sporulation

References

- BEDNÁŘ, M, V FRAŇKOVÁ and J SCHINDLER, et al. *Medical microbiology - bacteriology, virology, parasitology.* 1st edition. Prague: Marvil, 1996. 558 pp. ISBN 80-238-0297-6 .

Bacteria	

G +

coke

aerobic	*Micrococcus*	*Micrococcus luteus*
	Rhodococcus	*Rhodococcus equi*
facultatively anaerobic	*Enterococcus*	*Enterococcus durans* • *Enterococcus faecalis* • *Enterococcus faecium*
	Streptococcus	*Streptococcus agalactiae* • *Streptococcus mutans* • *Streptococcus pneumoniae* • *Streptococcus pyogenes* • *Streptococcus suis* • *Oral streptococci*
	Staphylococcus	*Staphylococcus aureus* • *Staphylococcus epidermidis* • *Staphylococcus intermedius* • *Staphylococcus saprophyticus*
anaerobic	*Peptococcus*	*Peptococcus niger*
	Peptostreptococcus	*Peptostreptococcus anaerobius* • *Peptostreptococcus prevotii* • *Peptostreptococcus vaginalis*

sticks

aerobic + facultative anaerobic	*Arcanobacter*	*Arcanobacterium haemolyticum*
	Bacillus	*Bacillus anthracis* • *Bacillus cereus*
	Corynebacterium	*Corynebacterium diphtheriae* • *Corynebacterium jeikeium* • *Corynebacterium ulcerans* • *Corynebacterium urealyticum*
	Erysipelothrix	*Erysipelothrix rhusiopathiae*
	Listeria	*Listeria monocytogenes*
	Nocardia	*Nocardia asteroides* • *Nocardia brasiliensis*
	Rhodococcus	*Rhodococcus equi*
anaerobic	*Actinomyces*	*Actinomyces* israeli • *Actinomyces naeslundi*
	Bifidobacterium	*Bifidobacterium dentium*
	Clostridium	*Clostridium botulinum* • *Clostridium difficile* • *Clostridium novyi* • *Clostridium tetani* • *Clostridium perfringens* • *Clostridium septicum* • *Clostridium ulcerans*
	Lactobacillus	*Lactobacillus acidophilus*
	Propionibacterium	*Propionibacterium acnes* • *Propionibacterium propionicus*

coke	aerobic	*Acinetobacter*	*Acinetobacter calcoaceticus*
		Moraxella	*Moraxella catarrhalis* • *Moraxella lacunata*
		Neisseria	*Neisseria gonorrhoeae* • *Neisseria meningitidis* • Non-pathogenic species of Neisseria
	anaerobic	*Veillonella*	*Veillonella alcalescens* • *Veillonella parvula*
cocobacilli	aerobic	*Rickettsia*	*Rickettsia prowazekii* • *Rickettsia rickettsii* • *Rickettsia typhi*
	aerobic	*Alcaligentes*	*Alkaligentes feacalis*
		Bartonella	*Bartonella bacilliformis* • *Bartonella henselae* • *Bartonella quintana*
		Bordetella	*Bordetella bronchiseptica* • *Bordetella parapertussis* • *Bordetella pertussis*
		Brucella	*Brucella abortus* • *Brucella canis* • *Brucella melitensis* • *Brucella suis*
		Burkholderia	*Burkholderia cepacia* • *Burkholderia mallei* • *Burkholderia pseudomallei*
		Francisella	*Francisella tularensis*
		Legionella	*Legionella pneumophila*
		Kingella	*Kingella denitrificans* • *Kingella kingae* • *Kingella oralis*
		Pseudomonas	*Pseudomonas aeruginosa* • *Pseudomonas fluorescens*
		Stenotrophomonas	*Stenotrophomonas maltophilia*

Go

sticks

facultatively anaerobic

Actinobacillus	*Actinobacillus equli* • *Actinobacillus lignieresii*
Aeromonas	*Aermonas caviae* • *Aeromonas hydrophila* • *Aeromonas sobria*
Afipia	*Afipia felis*
Citrobacter	*Citrobacter freundi* • *Citrobacter koseri*
Eikenella	*Eikenella corrodens*
Enterobacter	*Enterobacter aerogenes* • *Enterobacter cloacae*
Escherichia	*Escherichia coli*
Haemophilus	*Haemophilus ducreyi* • *Haemophilus haemolyticus* • *Haemophilus influenzae* • *Haemophilus parainfluenzae*
Klebsiella	*Klebsiella granulomatis* • *Klebsiella oxytoca* • *Klebsiella pneumoniae*
Pasteurella	*Pasteurella haemolytica* • *Pasteurella multocida* • *Pasteurella ureae*
Plesiomonas	*Plesiomonas shigelloides*
Proteus	*Proteus mirabilis* • *Proteus vulgaris*
Salmonella	*Salmonella* Enteritidis • *Salmonella* Typhi • *Salmonella* Paratyphi
Serratia	*Serratia marcescens*
Shigella	*Shigella boydii* • *Shigella dysenteriae* • *Shigella flexneri* • *Shigella sonnei*
Vibrio	*Vibrio cholerae* • *Vibrio parahemolyticus*
Yersinia	*Yersinia enterocolitica* • *Yersinia pestis* • *Yersinia pseudotuberculosis*

microaerophilic

Campylobacter	*Campylobacter coli* • *Campylobacter fetus* • *Campylobacter jejuni*
Helicobacter	*Helicobacter pylori*

anaerobic

Bacteroides	*Bacteroides fragilis* • *Bacteroides vulgatus*
Fusobacterium	*Fusobacterium necrophorum* • *Fusobacterium nucleatum* • *Fusobacterium stabile*
Leptotricha	*Leptotricha buccalis*
Mobiluncus	*Mobiluncus curtisii* • *Mobiluncus mulieris*
Prevotella	*Prevotella melaninogenica*
Porphyromonas	*Porphyromonas gingivalis*

acid resistant	sticks	aerobic	*Mycobacterium* — *Atypical mycobacteria* • *Mycobacterium tuberculosis* • *Mycobacterium leprae*
non-stainable G +/-	spiral	strictly aerobic	*Leptospira* — *Leptospira biflexa* • *Leptospira interrogans* • *Leptospira parva*
		microaerophilic	*Borrelia* — *Borrelia burgdorferi* • *Borrelia hermsi* • *Borrelia recurrentis* • *Borrelia vincenti*
		strictly anaerobic	*Treponema* — *Non-pathogenic treponems* • *Treponema carateum* • *Treponema pallidum* • *Treponema phagedenis* • *Treponema pertenue*

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