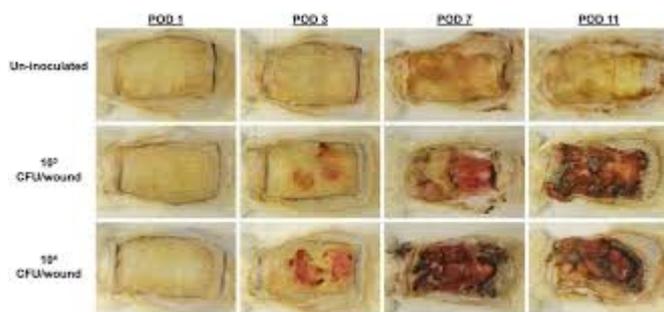
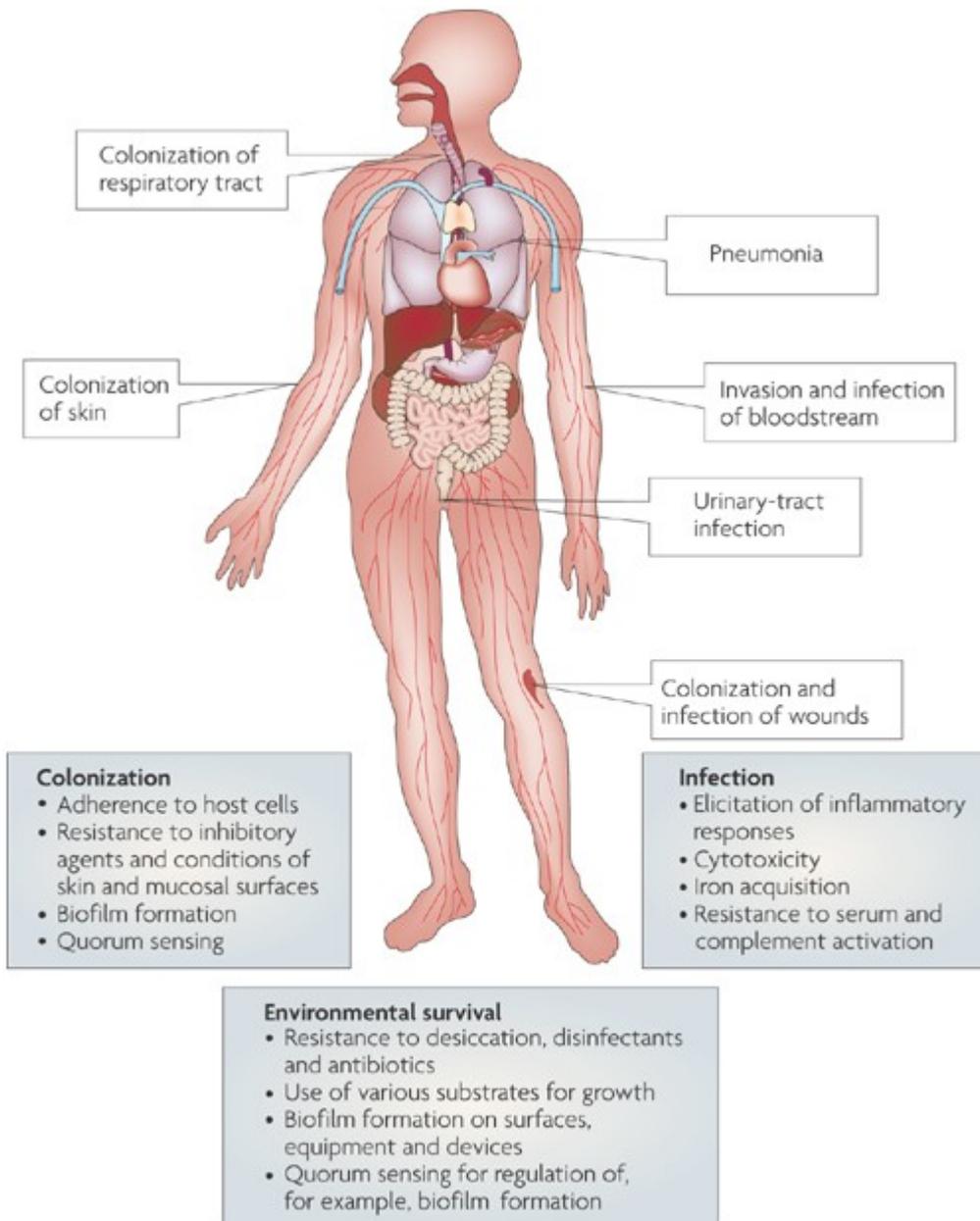


Acinetobacter, Moraxella, and Pseudomonas aeruginosa

Acinetobacter, Moraxella, and *Pseudomonas aeruginosa*

Acinetobacter





Nature Reviews | Microbiology

4

Definition and Key Features

- Gram-negative
- Non-motile bacteria

Major species:

- *Acinetobacter baumannii*
- *A. lwoffii*
- *A. haemolyticus*
- Part of normal skin flora

Common sites:

- Axillae
 - Groin
 - Toe webs
 - Dry skin areas
-

Epidemiology

- Present in ~20% of normal individuals

Higher risk:

- Young
- Elderly

Seasonal pattern:

- Peak in summer
 - Associated with sweating
-

Clinical Relevance

Opportunistic infections:

- Septicaemia
 - Meningitis
 - Osteomyelitis
 - Wound infections
-

Skin infections:

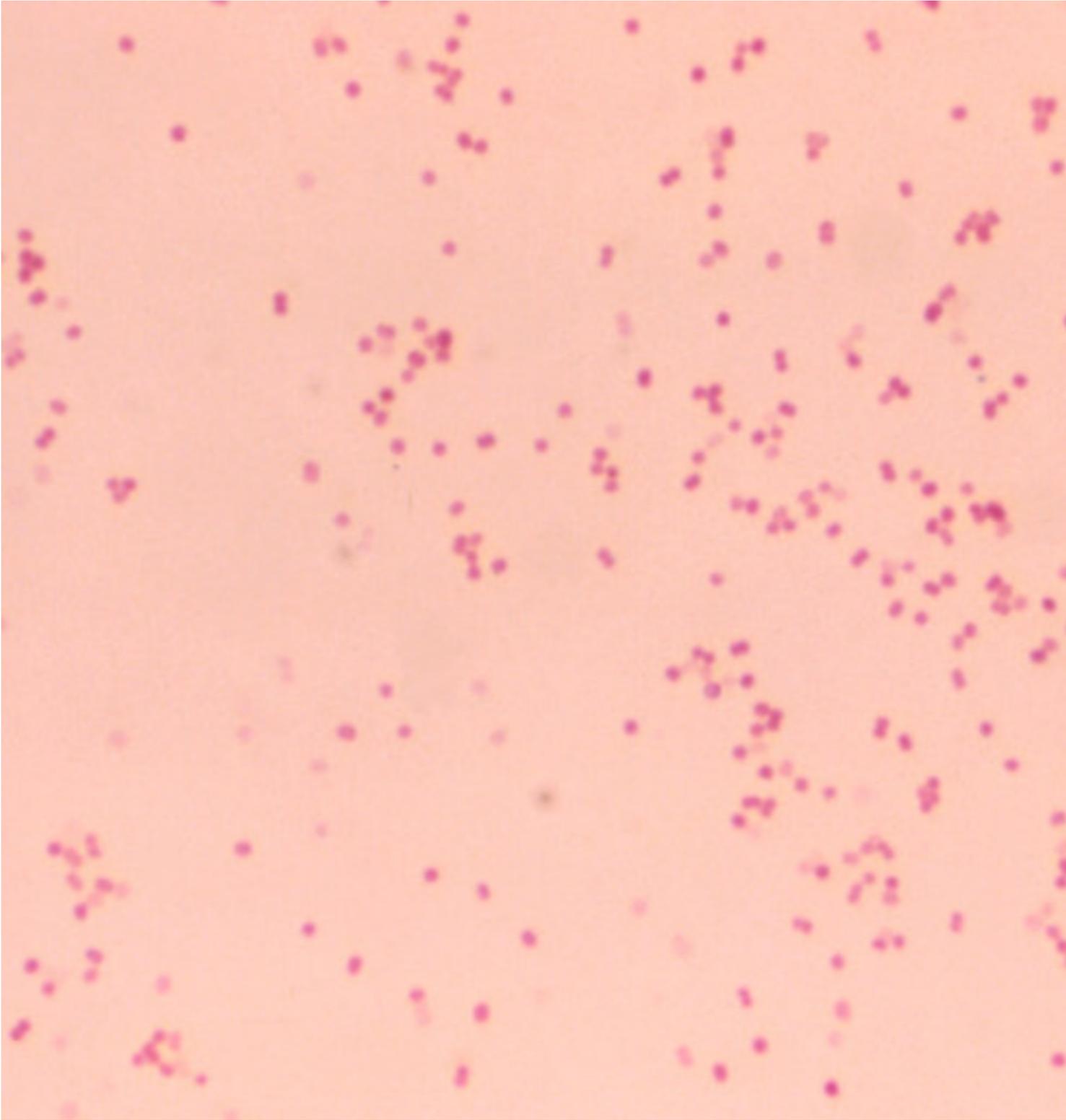
- Pustules
- Cellulitis

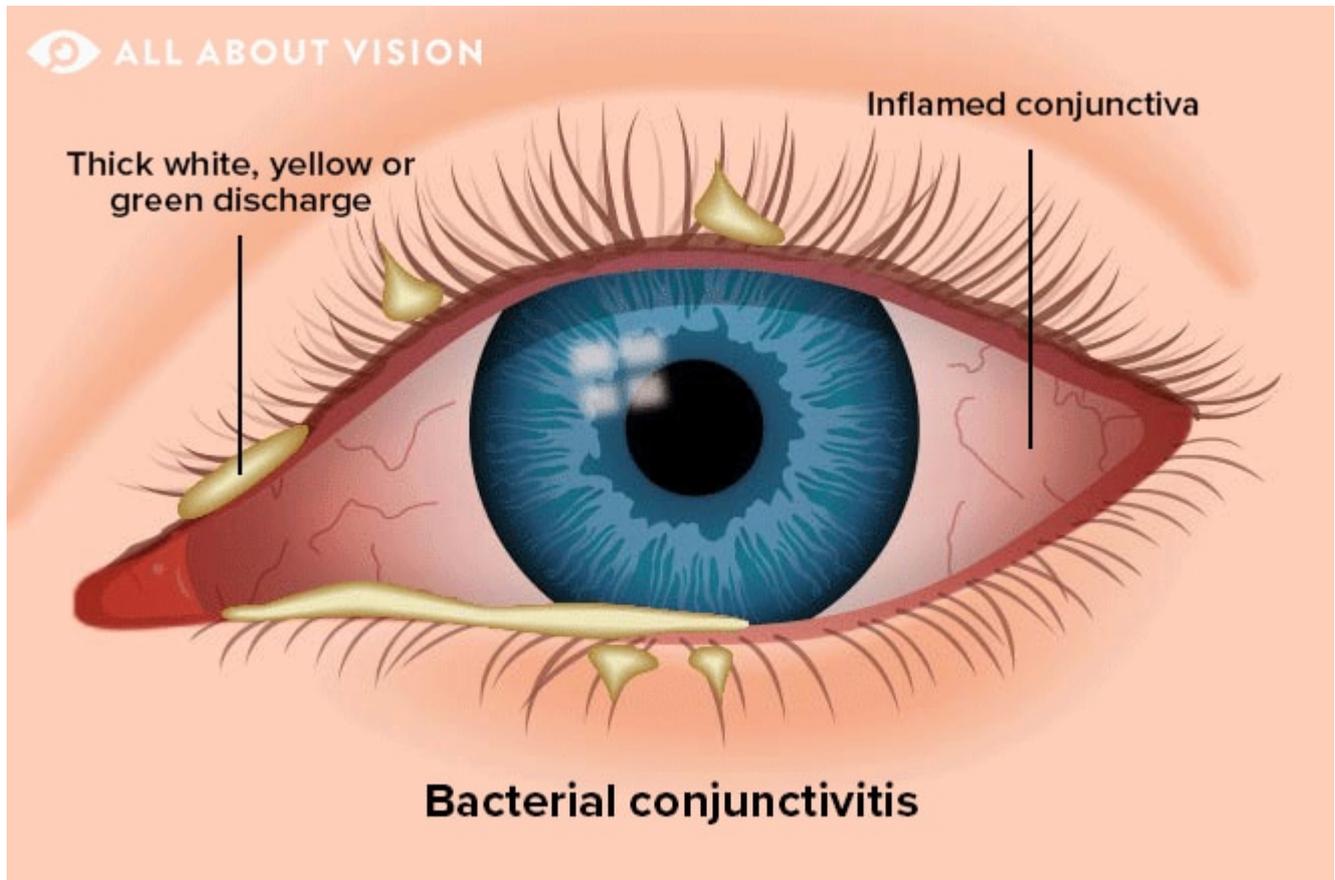
Common settings:

- Burns
 - Battle wounds
 - Indwelling IV catheters
-

Moraxella







4

Definition and Key Features

- Gram-negative bacteria

Main species:

- *Moraxella catarrhalis*
- Primarily respiratory pathogen
- Rarely causes cutaneous infections

Clinical Manifestations

Systemic infections:

- Gonococcaemia-like illness
 - Skin lesions
 - Bacteraemia:
 - Petechial rash
-

Arthritis and Skin Lesions:

- Joint inflammation
 - Associated skin findings
-

Association

- Respiratory infections
- Otitis media
- Conjunctivitis

(More common than skin involvement)

Pseudomonas aeruginosa





4

Definition and Characteristics

- Gram-negative

- Aerobic rod

Also known as:

- *P. pyocyanea*
-

Pigments

- Pyocyanin ? blue-green
 - Pyoverdin ? yellow
-

Habitat

- Moist skin areas:
 - Anogenital region
 - Axillae
 - External ear
 - Environment:
 - Soil
 - Water
 - Hospital settings
-

Epidemiology

- Colonizes:

- Burns
 - Ulcers
 - Moist lesions
 - Important nosocomial pathogen
 - Common in ICU settings
-

Clinical Features

Localized infections:

- Periumbilical infection (infants)
 - Tropical immersion foot:
 - Toe web maceration
 - Erosions
 - Green fluorescence (Wood's lamp)
 - Gram-negative folliculitis:
 - Hot tub / jacuzzi exposure
-

Severe infections:

- Burn infections:
 - Edema
 - Discolored slough

- Ecthyma gangrenosum:
 - Necrotic ulcers
 - Central eschar
 - Seen in immunocompromised
 - Septicaemia (severe cases)
-

Pathogenesis

- Colonizes damaged tissue
- Prefers sites with disrupted normal flora

Virulence factors:

- Exotoxins
 - Enzymes
 - Pigments
-

Management

Antibiotics:

- Combination therapy (resistant strains)
-

Prevention:

- Infection control in hospitals
 - Proper maintenance:
-

- Whirlpool baths

- Jacuzzis