Closing the Brief Case: *Mycoplasma hominis* Extragenital Abscess

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ANSWERS TO SELF-ASSESSMENT QUESTIONS

- Which of the following conditions is associated with extragenital *Mycoplasma hominis* infections?

- Neutropenia
- Hypogammaglobulinemia
- Obesity
- Diabetes

Answer: b. Extragenital *M. hominis* infections classically occur in patients who present with hypogammaglobulinemia, have received a solid-organ transplant, or have recently undergone surgery (postoperative infections). There is no literature precedent for an association between neutropenia, obesity, or diabetes and extragenital *M. hominis* infections.

- Which of the following statements concerning *Mycoplasma hominis* identification is correct?

- M. hominis* is unable to grow on blood or chocolate agar under 5% CO₂.
- M. hominis* is undetectable by Gram staining.
- M. hominis* is absent from MALDI-TOF MS databases.
- M. hominis* produces large colonies (>1 mm) on mycoplasma medium.

Answer: b. *M. hominis* is undetectable by Gram staining because it lacks a cell wall. *M. hominis* can grow on blood or chocolate agar after prolonged incubation. It is present in MALDI-TOF MS databases, but identification can be difficult due to the small size of the colonies. Even on mycoplasma-specific media, *M. hominis* colonies only grow to approximately 0.2 mm.

- Mycoplasma hominis* is naturally resistant to which class of antibiotics?

- Tetracyclines
- β -Lactams
- Lincosamides
- Fluoroquinolones

Answer: b. Because it lacks a cell wall, *M. hominis* is naturally resistant to β -lactams, which target cell wall synthesis. *M. hominis* is generally susceptible to tetracyclines, clindamycin, levofloxacin, and moxifloxacin, although acquired resistance has been reported.

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