

Images in Infectious Diseases

A rare complication of brucellosis: Superinfection of a mature ovarian cystic teratoma

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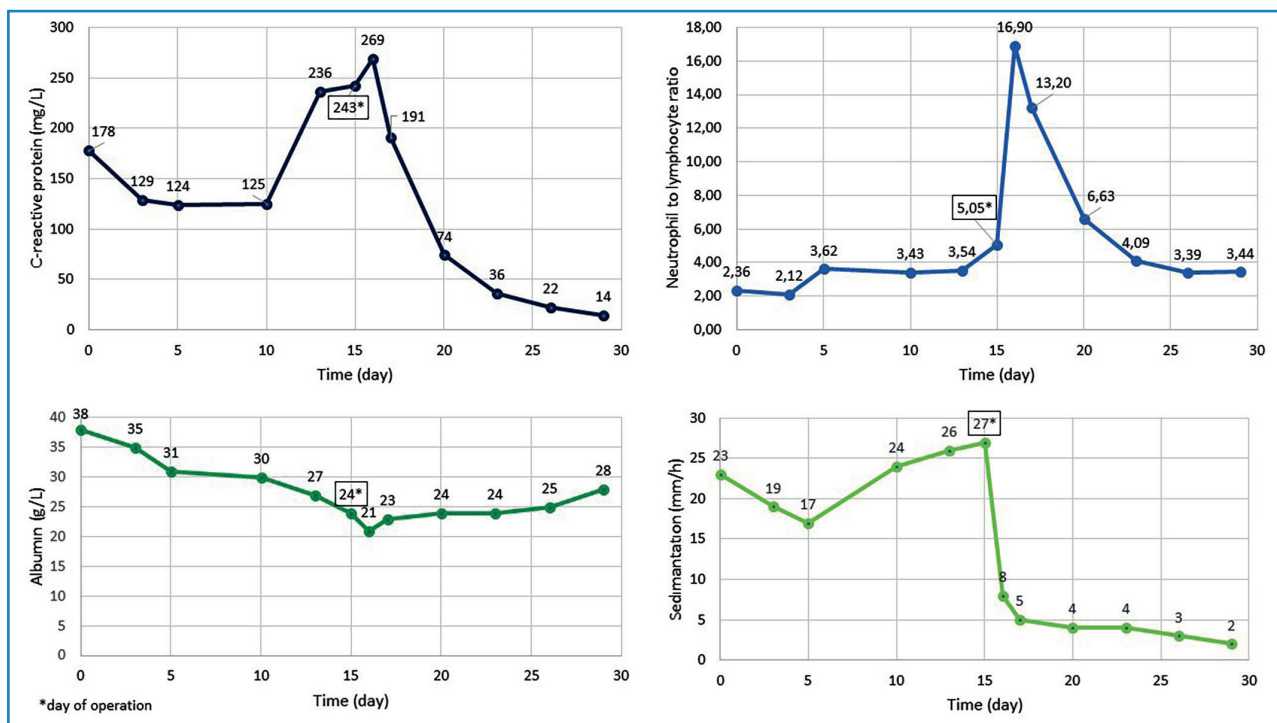


FIGURE 1: Changes in selected inflammatory markers during the course of treatment.

A 43-year-old woman rural dweller working in animal husbandry presented with high fever, chills, nausea, and vomiting. She was diagnosed with brucellosis based on the *Brucella* standard tube agglutination test and blood culture results. Due to persistent vomiting, she was treated with intravenous tigecycline and oral gentamicin and rifampicin therapy. However, despite appropriate

antimicrobial treatment, a clinical and laboratory response was not achieved. The course of inflammation indicators during treatment is shown in **Figure 1**. Right lower quadrant tenderness was noted on abdominal examination. Magnetic resonance imaging revealed a 12-cm cyst in the region of the right ovary, which was suspected to be a mature cystic teratoma (**Figure 2**). We performed right ovariectomy and cystectomy (**Figure 3**). The patient's fever, nausea, and vomiting resolved from postoperative day 2. Intraoperative cultures of samples of the teratoma yielded *Brucella* spp. The patient's treatment was switched to rifampicin and doxycycline 2 weeks postoperatively and was discontinued after 8 weeks. Treatment failure in brucellosis is defined as the persistence of disease signs and/or symptoms after the initiation of appropriate antimicrobial therapy¹. The most common complications of brucellosis are osteoarticular and genitourinary involvement². Considering the potential of *Brucella* to invade several tissues, this

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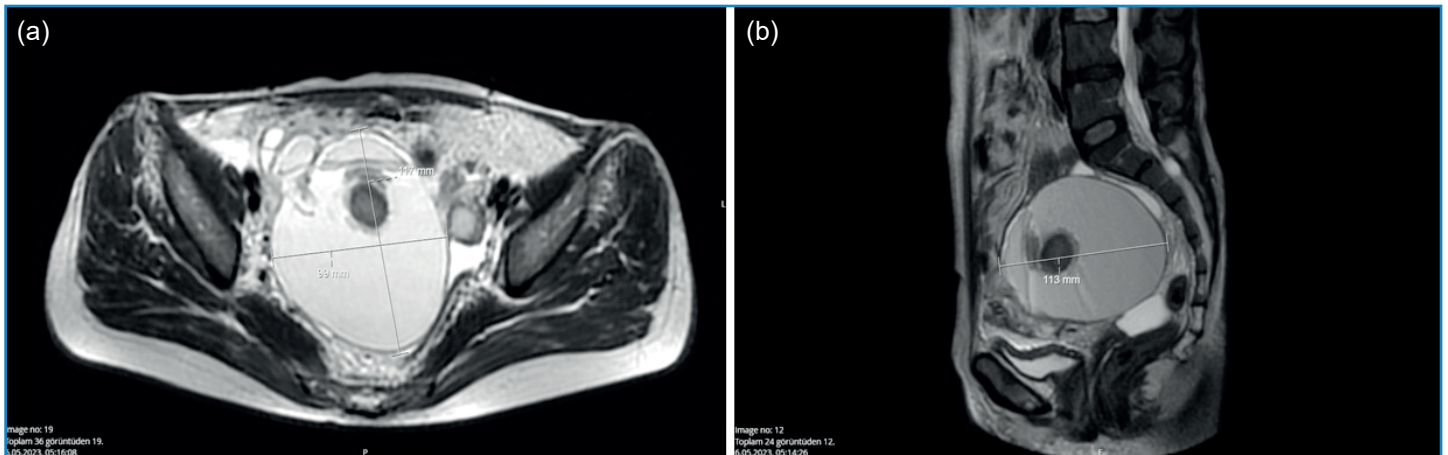


FIGURE 2: Mature ovarian cystic teratoma on T2-weighted axial (a) and sagittal (b) magnetic resonance imaging.

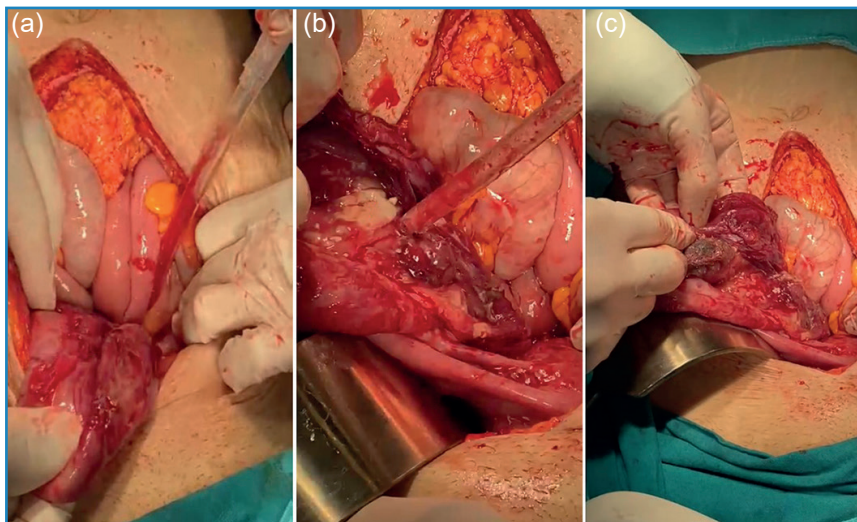


FIGURE 3: Intraoperative images of the ovarian mature cystic teratoma (a), showing the presence of adipose tissue (b), and hair (c) in the cyst.

case illustrates the importance of genitourinary system evaluation in the event of treatment failure³. Furthermore, tigecycline may be an option for combination therapy in patients with severe brucellosis⁴.

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