Poster

[P27-1] P27-1: Anti-infective drugs (6): Anti-MRSA and antifungals Chair: Yasuhiro Tsuji, Japan Wed. Sep 27, 2017 12:30 PM - 1:30 PM Annex Hall (1F)

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[P27-1-3] An effective case of replacement of teicoplanin with arbekacin for treatment of methicillin-resistant Staphylococcus aureus iliopsoas abscess

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Background

Iliopsoas abscess is often caused by inflammation of the proximal iliopsoas organs owing to poor nutritional status and complications resulting from diabetes. It is an infectious disease caused by with *Staphylococcus aureus*. Teicoplanin (TEIC) or linezolid (LZD), which has good muscle tissue migration properties, is often selected for the treatment of lumbar muscle abscess caused by methicillin-resistant *Staphylococcus aureus* (MRSA). We reported a case in which arbekacin (ABK) was more effective than TEIC.

Methods

[Case] Practitioners had observed a lapse in lower back pain and left lower limb pain. However, the pain exacerbated and body movement became difficult. Hence, it was classified as an emergency case and transferred to our hospital. With white blood cell count of 13700/mm³, CRP level of 27 mg/dL and heat shock at 38 °C, magnetic resonance imaging (MRI) revealed extensive abscess from the left thigh circumference to iliac muscle and iliopsoas. In addition, HbA1c of 13.3%, occasional blood glucose of 300 mg/dL and impaired glucose tolerance were also recognized. The patient was hospitalized for blood glucose control and chemotherapy.

Results

Improved insulin therapy was performed from the time of admission, and cefazolin administration was initiated. However, *Streptococcus agalactiae* was detected in the blood culture after hospitalization. Therefore, the antibiotic was changed to ampicillin. An abscess was punctured and left to drain for 15 days; however, the culture of the punctured abscess showed negative results. Further, because MRSA was detected in the exudate after removal, TEIC was administered at a trough concentration of 27-28 μ g/mL for 11 days. However, CRP increased again, and therefore the glycopeptide TEIC was replaced with aminoglycoside ABK. ABK was designed to be administered continuously at a trough concentration of 1 μ g/mL or less for 29 days. CRP level gradually decreased in the following week and blood test was negative for CRP.

Conclusions

For the treatment of MRSA iliopsoas abscess, TEIC (JPY3,741/day) or LZD (JPY29,994/day) is recommended in case of tissue migration; however, ABK (JPY5,645/day) is also a useful alternative.