Background

Tazobactam/piperacillin (TAZ/PIPC), indicated for pneumonia and intra-abdominal abscess in Japan, is recommended as a single-drug therapy, together with carbapenems, in the guidelines for intraabdominal infection published by the American College of Surgeons and Surgical Infection Society in 2010 in the United States. Although diarrhea is a known common adverse reaction of this drug, there are no reports of leukopenia after treatment with this drug in Japan.

Objectives

We observed the case of a postpartum woman who had leukopenia caused by TAZ/PIPC used for intraabdominal infection. We have reported an improvement in symptoms owing to pharmacist intervention.

Results

This patient had leukopenia on Day 14 of treatment with TAZ/PIPC and her white blood cell count increased after drug discontinuation. We considered this event an adverse drug reaction caused by TAZ/PIPC, based on a previous report in which patients develop leukopenia, on average, on Day 15 of TAZ/PIPC treatment. As the patient was in the postpartum period, we proposed meropenem as an alternative to allow the patient to continue to breast feed, because a lower proportion of this drug is transferred to breast milk.

Conclusion

For patients treated with TAZ/PIPC, pharmacists not only need to check the dosage and administration, but should be actively involved in the proposal of blood tests and the assessment of test results, to try to avoid serious adverse drug reactions such as leukopenia.