High dose methotrexate therapy “The role of the clinical pharmacist”

Osama M Al-Quteimat
King Abdullah Medical City, Saudi Arabia

Methotrexate (MTX) is an antifolate cytotoxic medication used to treat certain types of cancer and at lower doses for rheumatic diseases. MTX has many serious adverse effects, such as myelosuppression, hepatic, renal and pulmonary disorders. For safe and effective use of high dose methotrexate (HDMTX) certain precautions should be followed. We present this case study with short review to briefly summarize the important practical issues related to HDMTX therapy.

Case: The case concerns a 21-year-old male patient with osteosarcoma of the right tibia, admitted to the oncology department to receive chemotherapy in the form of 12 g/m2 high-dose methotrexate with leucovorin rescue. Patient is receiving other interacting medications. Clinical pharmacist has a crucial role in optimizing HD-MTX therapy and to prevent potential toxicities.

Conclusion: MTX has many serious and sometimes life-threatening side effects that can be avoided by following special precautions during HDMTX administration and post-treatment management guidelines. Close monitoring, adequate hydration and avoidance of interacting drugs are general principles applied to prevent HDMTX toxicity that are common to all regimens.

Biography
Osama M. Al-Quteimat has completed his Master degree in clinical pharmacy at the age of 26 years from University of Jordan. He is a board-certified oncology pharmacist working as clinical pharmacist in King Abdullah Medical City, a leading healthcare institution providing high-quality quaternary healthcare, education and research in Saudi Arabia-Makkah. He has published many papers in the field of clinical pharmacy in reputed journals.

systemman86@yahoo.com

http://dx.doi.org/10.4172/2167-065X.S1.006