中文題目:接受鉑金化療之癌症患者的電解質異常

英文題目: Electrolyte disorders in cancer patients that received platinum chemotherapy

作 者:鄭玉梅¹,張家崙 ^{1,3},胡名宏 ^{1,3},劉興璟¹, 賴基銘 ^{1,3,4,5},邱宗傑* ^{1,3,5}

服務單位:¹臺北市立萬芳醫院內科血液與腫瘤科,²臺北醫科大學附屬萬芳醫院病理科, ³臺北醫科大學醫學院醫學院,⁴臺北醫科大學附屬臺北市萬芳醫院癌症中心,⁵臺北市退伍軍

人總醫院醫學部

Background: Electrolyte disorders are prevalent in cancer patients. They may arise from cancer itself as paraneoplastic syndrome; tumor lysis syndrome; anti-cancer therapies such as platinum; and associated comorbidities or managements. Due to nonspecific presentations such as anorexia, fatigue, they can be misdiagnosed as cancer cachexia or treatment related complications. However, such disorders may threaten life without a specific foreknowledge, thereby, warrant a high index of suspicion. Here in, we report 3 cases with electrolyte disorders from chemotherapy.

Methods: We identified and reviewed the inpatient medical records and radiologic films of 3 cancer patients in our institution with a comprehensive systematic literature review to provide awareness on the life threatening electrolyte disorders, especially those associated with platinum based chemotherapy.

Results: In the present series, the most common presenting symptoms of electrolyte disorders were fatigue, loss of appetite and weakness. In the first case, we observed the thrombotic microangiopathy related oliguric kidney injury with fatal hyperkalemia, which necessitated hemodialysis. In the second and third cases, electrolyte disorders were incidental findings while fever was the chief complaint. In the second case, after differentiation with SIADH induced by infection or cancer, platinum-mediated renal salt-wasting syndrome characterized by pan-electrolyte depletion guided emergent volume repletion which prevented disastrous sequelae. In the third case, hypovitaminosis-D related hypocalcemia was detected apart from urinary Ca loss, with the calcium level normalized only after vitamin D supplementation. We analyzed different etiologies underlying electrolyte disorders related to platinum chemotherapy and appropriate management options accordingly.

Conclusion: Management of electrolyte disorders depends on the underlying etiology, onset, severity and hemodynamic stability. To prevent life threatening sequelae, clinicians should be vigilant for such disorders.