Sorafenib ★ S

Adrenal insufficiency (first report) in an elderly patient: case report

A 77-year-old man developed adrenal insufficiency during treatment with sorafenib for advanced hepatocellular carcinoma. He later died.

The man began receiving sorafenib 800mg bid [route not stated]. On day 7 he had an elevated serum potassium level of 5.5 mEq/L. He became unable to stand by day 11, and on day 14 he was hospitalised with hyperpostassemia of 6.7 mEq/L and hypoglycaemia of 27 mg/dL. He received glucose and furosemide. His potassium levels improved, but his hypoglycaemia persisted. His ACTH and cortisol levels had not increased at the time of hypoglycaemia, which suggested a relative adrenal insufficiency. A short-acting corticosteroid was administered, and his blood glucose level increased to 150 mg/dL. After several days, his morning fasting blood glucose level fell to about 20 mg/dL. He received a longer acting corticosteroid, and started having late evening snacks. Hypoglycaemia persisted; serum testing revealed the presence of 'big' insulin-like growth factor-II. His sorafenib dosage was reduced to 400 mg bid on the basis of tumour marker level decreases, and he was discharged. However, he was readmitted unconscious 10 days later, due to hypoglycaemia. With treatment his hypoglycaemia improved, but he died of respiratory failure related to lung metastases after 6 days.

Author comment: "The possibility that sorafenib suppressed adrenal function must be considered, since there were no other factors known to affect adrenal function such as metastasis to the adrenal glands."

Okushin K, et al. IGF-II producing hepatocellular carcinoma treated with sorafenib: Metabolic complications and a foresight to molecular targeting therapy to the IGF signal. Case Reports in Gastroenterology 6: 784-789, No. 3, Sep-Dec 2012. Available from: URL: http://dx.doi.org/10.1159/000346462 - Japan

>> Editorial comment: A search of AdisBase, Medline and Embase did not reveal any previous case reports of adrenal insufficiency associated with sorafenib. The WHO ADR database contained 8 reports of adrenal insufficiency associated with sorafenib.