MedWatch The FDA Safety Information and Adverse Event Reporting Program

SGLT2 Inhibitors: Drug Safety Communication - Labels to Include Warnings About Too Much Acid in the Blood and Serious Urinary Tract Infections

[Posted 12/04/2015]

針對第二型糖尿病藥物鈉離子依賴型葡萄糖運輸蛋白抑制劑 sodium-glucose cotransporter-2 (SGLT2) inhibitors，FDA 已經在仿單上加註可能導致酮酸中毒和泌尿道感染等風險的安全警訊。兩者情況皆可能導致住院。

FDA 藥物不良反應通報系統中，從 2013 年 3 月到 2014 年 5 月確認有 73 件案例是第一型或第二型糖尿病患者因為使用 SGLT2 抑製劑而造成酮酸中毒。酮酸中毒的症狀包括有噁心，嘔吐，腹痛，疲倦和呼吸困難。

另外 FDA 藥物不良反應通報系統中，從 2013 年 3 月到 2014 年 10 月也確認有 19 件危及生命的血液感染(尿路敗血症)和腎臟感染(腎盂腎炎)，這些感染起因皆是使用 SGLT2 抑製劑造成的泌尿道感染。而這 19 個患者皆有住院，有一些還需要重症加護病房的照護，或是因為腎臟衰竭而進行透析。

因此，FDA 在所有 SGLT2 抑製劑仿單上增加酮酸中毒和泌尿道感染等安全議題的警語和注意事項。FDA 也要求 SGLT2 抑製劑製造商進行上市後藥物的主動監視，分析上市後自發性通報的 SGLT2 抑製劑造成的酮酸中毒，包括為期五年的後續追蹤以便收集更多的資料。

建議

當病患有任何的酮酸中毒症狀時應停止服用 SGLT2 抑制劑，並立即尋求醫療的協助。醫護人員應在病患出現預警的症狀時評估是否為酮酸中毒和泌尿道感染。SGLT2 抑制劑導致的酮酸中毒也可能發生在血糖不是很高的情況下，一旦懷疑是酮酸中毒時，應該停止使用 SGLT2 抑制劑並立即給予治療。

[Posted 12/04/2015]

SGLT2 Inhibitors: Drug Safety Communication - Labels to Include Warnings About Too Much Acid in the Blood and Serious Urinary Tract Infections

AUDIENCE: Pharmacy, Emergency Medicine

ISSUE: An FDA safety review has resulted in adding warnings to the labels of a specific class of type 2 diabetes medicines called sodium-glucose cotransporter-2 (SGLT2) inhibitors about the risks of too much acid in the blood and of serious urinary tract infections. Both conditions can result in hospitalization.

FDA issued a Drug Safety Communication in May 2015 warning about the risk of ketoacidosis with SGLT2 inhibitors and alerting that the Agency would continue to evaluate this safety issue. A review of the FDA Adverse Event Reporting System (FAERS) database from March 2013 to May 2015 identified 73 cases of ketoacidosis in patients with type 1 or type 2 diabetes treated with SGLT2 inhibitors (see the Drug Safety Communication Data Summary). Symptoms of ketoacidosis include nausea, vomiting, abdominal pain, tiredness, and trouble breathing.

FDA also identified 19 cases of life-threatening blood infections (urosepsis) and kidney infections (pyelonephritis) that started as urinary tract infections with the SGLT2 inhibitors reported to FAERS from March 2013 through October 2014. All 19 patients were hospitalized, and a few required admission to an intensive care unit or dialysis in order to treat kidney failure.

As a result, FDA added new Warnings and Precautions to the labels of all SGLT2 inhibitors to describe these two safety issues, and to provide prescribing and monitoring recommendations. FDA is also requiring manufacturers of SGLT2 inhibitors to conduct a required postmarketing study. This required enhanced pharmacovigilance study requests that manufacturers perform analyses of spontaneous postmarketing reports of ketoacidosis in patients treated with SGLT2 inhibitors, including specialized follow-up to collect additional information, for a period of 5 years.

BACKGROUND: SGLT2 inhibitors are a class of prescription medicines that are FDA-approved for use with diet and exercise to lower blood sugar in adults with type 2 diabetes. Medicines in the SGLT2 inhibitor class include canagliflozin, dapagliflozin, and empagliflozin.

RECOMMENDATION: Patients should stop taking their SGLT2 inhibitor and seek medical attention immediately if they have any symptoms of ketoacidosis.
Health care professionals should assess for ketoacidosis and urinary tract infections in patients taking SGLT2 inhibitors who present with suggestive symptoms. Ketoacidosis associated with the use of SGLT2 inhibitors can occur even if the blood sugar level is not very high. If ketoacidosis is suspected, the SGLT2 inhibitor should be discontinued and treatment instituted promptly.