Effectiveness of long-term treatment with SGLT2 inhibitors in elderly T2DM patients: Real-world evidence from a specialized diabetes center in Thailand

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Objective: It is uncertain that data from real-world studies of SGLT2i will obtain those outcomes as seen in clinical trials especially in elderly patients.

Materials and Methods: Diabetic patients who had been prescribed SGLT2i and continue to use at least 6 months between November 1, 2014 and June 30, 2016 in Theptarin Hospital were retrieved. The characteristics of patients, metabolic parameters were evaluated and compared between elderly patients who aged ≥65 years old and younger patients.

Results: A total of 189 diabetic patients (females 50.3%, mean age 59.9±12.3 years, T2DM 97.3%, duration of diabetes 16.3±9.2 years, baseline BMI 29.9±6.1 kg/m2, baseline A1C 8.8±1.6%) were prescribed SGLT2i during study period. Evidence suggestive of genital infection and urinary tract infection were reported in 2.6% and 2.1% of patients. 146 patients (43.2% aged ≥65 years) who continue to use at least 6 months (median time 12 months) were included in analysis. At the last follow-up, median A1C reduction (0.6 V.S 0.8%) and weight reduction (2.0 V.S. 2.2 kgs) were not different in elderly patients when compared with younger patients. Increased hematocrit was observed frequently in both groups of patients.

Conclusion: Treatment associated risks and benefits should be assessed on a case-by-case basis among geriatric patients. In this real-world data, SGLT2i demonstrated safety and effectiveness in elderly patients as well as younger patients. However, elderly patients should be advised to maintain good levels of hydration in order to minimize the risk of potential adverse outcomes.