

中文題目：利尿劑高血壓藥和抗高尿酸藥物的處方串聯

英文題目：Prescription cascade of thiazide diuretics and antihyperuricemic agents

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**Background:** Thiazide and thiazide-like diuretics are effective and cheap antihypertensive agents that can induce serum hyperuricemia. A prescribing cascade happens when the hyperuricemia is conceptualized incorrectly as a new medical problem and an antihyperuricemic agent is used to manage this consequence. The prescribing cascade involving the thiazide diuretics and antihyperuricemic agents is not well elucidated in a population level.

**Method:** A population-based, retrospective cohort study underwent using the Taiwan National Health Insurance Registry Database (NHIRD) of adults 20 years or older with hypertension and new dispensing antihypertensive drugs from January 1, 2000 to December 31, 2017 in Taiwan.

**Results:** The cohort included 5040 adults ( $\geq 20$  years) with hypertension who were newly dispensed thiazide diuretics, 59122 patients who were newly dispensed other antihypertensive medications. At index date, the mean (SD) age was 60.28 (14.26) years, and 191 685 (56.54%) were women in the thiazide group. Individuals who were newly dispensed thiazide diuretics had a higher cumulative incidence of using a antihyperuricemic agents than patients in control groups (1.44% vs 0.58%,  $P < .001$ ). After adjustment, patients who were newly dispensed thiazide diuretics had higher rates of using antihyperuricemic agents compared with patients who were newly dispensed other antihypertensive drugs after adjustment (HR, 2.03; 95% CI, 1.41-2.91 in the first 30 days after index [days 1-30]; 2.11; 95% CI, 1.29-3.46 in the subsequent 150 days [days 31-180]; and 2.39; 95% CI, 1.82-3.13 more than 180 days of follow-up [days  $>180$ ]).

**Conclusion:** In this large contemporary Asian cohort, we compared differences between TAV…………… Adult patients with hypertension who newly used thiazide diuretics had higher rates of subsequently dispensed antihyperuricemic agents. Clinicians who use thiazide diuretics to handle hypertension should aware this common prescribing cascade and avoid prescribing unnecessary medications that may result drawbacks.