

# 日本における住民コントロールを用いた症例対照研究は可能か？ — 薬剤の使用頻度に基づく検討 —

大場延浩、佐藤嗣道、久保田潔\*

東京大学大学院医学系研究科薬剤疫学講座 〒113-8655 東京都文京区本郷7-3-1

## **Is a case-control study using community controls feasible in Japan? : The prevalence of drug use in the Japanese population.**

Nobuhiro OOBA, Tsugumichi SATO, Kiyoshi KUBOTA\*

Department of Pharmacoepidemiology, Faculty of medicine, University of Tokyo 7-3-1 Hongo, Bukyo-ku, Tokyo, 113-8655 JAPAN

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### **Abstract**

**Objective:** There have been only a few case-control studies conducted in Japan on adverse events associated with drug treatment. Most were hospital-based but were not case-control studies using community controls.

**Methods:** We analyzed data on drug use obtained from community controls in a case-control study on the relationship between non-steroidal anti-inflammatory drugs (NSAIDs) and upper gastro-intestinal bleeding (UGIB) recently conducted in Japan. Information on prescription drugs and the over-the-counter (OTC) medications used within 4 weeks prior to the day of interview obtained from the control group was analyzed. Particular attention was paid to drugs used by 1% or more of controls because a case-control study using community controls on such drugs would require an approximate sample size (cases + controls) of 2000 or less and would be feasible.

**Results:** We analyzed the use of drugs by 453 community controls of which 341 were males; 345 (76%) of 453 controls used at least one drug within 4 weeks prior to the interview. More than 1% and 3% of controls used 51 and 7 individual prescription drugs, respectively, and the drug most frequently used was amlodipine (used by 7.9%). Similarly, more than 1% and 3% of controls used 50 and 13 prescription drug classes, respectively, where the class most frequently used was calcium channel blockers (19.0%). More than 1% and 3% used 24 and 16 OTC drugs, respectively, and the most frequently used were OTC drugs containing caffeine (17.7%).

**Conclusions:** For several drugs, case-control studies using community controls would be feasible.

**Key word:** Case-control study, Community controls, Prevalence of drug use, ICH E2E, Population-based case-control study