Hypertension is a common disease found in communities and routinely treated with long-term antihypertension regimens. Most internist who treat hypertension patients underestimated periodontal tissues health and not connecting to the hypertension events or medication used. This medications stimulate fibroblast cells proliferation, and eventually cause gingival hyperplasia. This study conducted to observe hyperplasia events in hypertension patients and correlate them with the medication used. One hundred hypertension patients who visit endocrine clinic RSUP DrWahidinSudirohusodo participate in this observational study, with history of drug categories used, plaque inflammations, and gingival enlargement frequencies. The study found the most consumed drug category is nifedipine and significantly correlated with hyperplasia, moderate oral hygiene also found in most of the patient, that show the role of the accumulation of plaques with nifedipine caused hyperplasia gingiva. This finding is a cornerstone for anti-hypertention drug substitution in endocrine clinic DrWahidinSudirohusodo Hospital and suggest an increase in attention to the health of periodontal tissue of patient.