Letale Polypharmazie bei einem Hypertoniker: Lethal polypharmacy in a patient with arterial hypertension

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HISTORY: A 86-year-old man was referred as he developed a ventricular escape rhythm and severe hypotension. Although external cardiac pacing was begun, the patient subsequently needed intubation as of progressive cerebral deterioration. It turned out that the patient had been treated with a combination compound including hydrochlorothiazide 50 mg, amilorid 5 mg and timolol 20 mg daily for several years. A second combination compound including verapamil 180 mg and trandolapril 2 mg daily was added 5 days prior to hospitalisation due to insufficient control of arterial hypertension.

INVESTIGATIONS: At admission, the patient was comatose without focal neurological findings. Laboratory analysis revealed lactic acidosis and severe hyperkalemia. No evidence for acute coronary syndrome was found.

TREATMENT AND COURSE: Hyperkalemia was successfully treated using calcium gluconate, insulin and glucose. External heart pacing and circulatory support using epinephrine were ceased after conversion into a stable sinus rhythm. Renal failure however did not resolve. CT-scans of the brain were performed on the third day as of protracted coma. They showed extended infarction in the area of the left arteria cerebri media with beginning brain edema. Although mechanical ventilation could be stopped as of sufficient respiration, the patient died on the sixth day. CONCLUSION: The presented case describes probably drug-associated severe hyperkalemia and bradycardic arrhythmia, hypotension and (eventually preexisting) normuric renal failure.