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SEASONAL VARIATION IN THE NUMBER OF PATIENTS WITH PROFOUND HYPONATREMIA (<125 MEQ/L) AT THE ADMISSION TO MATSUMOTO MEDICAL CENTER IN JAPAN

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We experienced a case of severe hyponatremia (serum Na level, 104 mEq/L) while treating with a thiazide diuretic for hypertension. Then, we surveyed the frequency of patients with profound hyponatremia (<125 mEq/L) at the admission to Matsumoto Medical Center Matsumoto Hospital from May 2016 to April 2017 during one year prior to the hospital admission of the index patient. The patients with profound hyponatremia were 127 in 4,223 newly admitted patients. Out of 127 patients, 118 patients were aged 65 years or older. Ten patients with severe hyponatremia (<115 mEq/L) were all older than 65 years, in which two patients including the index patient were prescribed a thiazide diuretic. Table 1 shows the frequency of patients with profound hyponatremia each month during the surveillance period. It is of interest that seasonal variation was found in the number of the patients with profound hyponatremia. The frequency was significantly ($p=0.013$, unpaired t-test) low during the relatively cold period around Matsumoto City in Japan from November to March compared

to the other period in the year. Such seasonal variation suggests that the occurrence of profound hyponatremia is to no small extent attributable to elderly patients' living environment. This finding is also expected to help healthcare providers in Preventive Medicine and Public Health.

Table 1. The number of patients with profound hyponatremia admitted each month

	2016						2017						Total
	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	
No.	12	10	21	13	7	16	6	7	9	4	7	15	127
%*	3.6	2.7	6.4	3.5	2.1	4.9	1.6	2.0	2.5	1.1	2.0	4.0	3.0

*Percentage of the hyponatremic patients in newly hospitalized patients each month and in total

Biography

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