

Investigation of clinical case study of abnormality of tastes(hypogeusia) and biological test sodium and chloride ions in body fluids(serum, urine and saliva) and expired air and of threshold levels of carbohydrate and fat metabolites within administration of salt

In this paper, the clinical cases of abnormalities of smell(anosmia) and taste(hypogeusia) in the Shinshu University School of Medicine in one year of 1987(Jan. to Dec.), and electrolytes, trace metals in the body fluids(serum, urine, and saliva), and metabolites in expired air were summarized.

The subjects of abnormalities of smell(anosmia) and taste(hypogeusia) in the cases were 86 (male 27, female 59; female was more than male) for smell(anosmia) within otorhinolaryngology Div., and were 37 cases (male 22, female 15; male was more than female) for taste(hypogeusia): the content are as follows; otor, 20; den.o.s. 7; Surgery 2, 5; Internal Med. 1, 4; Internal Med. 3, 1.

The content of 11 cases during 4th, May, 1986 to 24th, June, 1989 in Div. of den.o.s. are as follows: case ①, heavy gingivostomatosis due to occupational Pb poisoning 33 yrs. female, whole blood-Pb 30 ug/dl, serum-Zn 0.80ppm normal,

serum-Cu 5.90ppm(l); case ②, 4th, Oct, 1986, vertigo, sickness pain of digestive tract, ruber from oral cavity and tongue to gula, with oliguria due to Difolatan poisoning by 10 yrs. on working times of agriculture germicide, 63 yrs. female, serum-Zn 1.42ppm(l), -Cu 1.40 ppm, urine-Zn 0.90ppm(l), -Ca. 153ppm(l); case ③, 6th, March, 1987, 60 yrs. female; case ④, 29th May, 1987, 65 yrs. male; case ⑤, 19th, June, 1987 over one year of case 1; case ⑥, 13th, Oct. 1987; case ⑦, 16th, Oct. 1987, 63 yrs. female; case ⑧, 6th, Nov. 1987, 64 female; case ⑨, 8th, March, 1988, 72 yrs. male; case ⑩, 19th, April, 1988, 60 yrs. female; case ⑪, 6th, June, 1989, 65 yrs. female, past 1 yr. DIC; tongue and upper labium oris all area, sweetish taste perception deficiency, 24th, June, 1989, fine test; serum-Zn 0.61ppm(l), urine-Zn 0.22ppm(l); these data show the hypogeusia with Zn deficiency. The data with taste disc show sweet, bitter, salty deficiencies.

Analytical time in normal measurement mode for one mass spectrum data was about 3 min (max. speed, full scanning), and that of MID measurement mode of peak 8 ch. was 1200 sec for max. continuous analysis.