Effects of High lodine and High Fluorine on Children's Intelligence and the Metabolism of lodine and Fluorine Yang Yingkui, Wang Xiuhong, Guo Xiaowei, et al, Shandong Provincial Institute of Endemic Disease Control, Jinan 250014

An investigation on children's intelligence and the metabolism of iodine and fluorine in high iodine and fluorine regions was carried out. The results were as follows.

In high iodine and high fluorine areas, the thyroid enlargement prevalence rate among inhabitants and that among children were 3.8% and 29.8%, respectively. The dental fluorosis prevalence rate among inhabitants and that among children was 35.48% and 72.9%, respectively. The pupils average intelligence quotient (IQ) was 76.67±7.75, slightly lower than the control point, but that of low intelligent pupils was 16.7%. The urinary iodine and urinary fluoride were 816.25±1.80 µg/L and 2.08±1.03mg/L, respectively, markedly higher than the control point. The thyroid iodine-131 (1311) uptake rate was markedly lower than the control point. The values at 3h and 24h were 9.36±1.55% and 9.26±

4.63% respectively. The serum TSH was obviously higher than the control point. These results indicate that high iodine and high fluorine exert severe damage to human body.

Key words High iodine goiter Dental fluorosis Thyroid stimulating hormone (TSH)

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(收稿: 1993-05-07 修回: 1993-11-05)

大连市469名献血员丙型肝炎病毒感染情况调查

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我们于1992年1~5月份应用酶联免疫吸咐 试验 对大连市红十字血液中心的469名献血员进行抗—HCV检测。结果表明,抗—HCV总阳性率为8.96%(42/469)。检测公民义务献血员112名,抗—HCV全部阴性;职业全血献血员106名,抗—HCV阳性率为5.66%(6/106),显著高于公民义务献血员($\chi^2=4.58$, P<0.05);检测职业单采浆还输血球献血员191名,抗—HCV阳性率为16.23%(31/191),显著高于职业全血献血员($\chi^2=6.98$, P<0.05)。

公民义务献血员均为本地人,无一例抗一HCV阳性。职业献血员,本地区的208名(固定于本地),抗一HCV阳性率2.40%(5/208);非本地区的89名(各地流动的),抗一HCV阳性率35.96(32/89),流动献血员抗一HCV阳性率显著高于固定式献血员抗一HCV

 $(\chi^2 = 64.34, P < 0.01)$.

35~39岁年龄组抗-HCV检出率最高(12.66%), (10/79),其次为30~34岁年龄组,检出率为10.61%(14/132),各年龄组间无显著性差异($\chi^2=4.11$, P>0.05).

HCV感染与ALT,血型的关系.在37名抗一HCV阳性者中,ALT异常者5名,异常率为13.51%。在血型分布中,A型抗一HCV检出率最高(13.16%),其次为B型(8.44%),AB型最低(5.13%),差异不显著(χ^2 =3.7294, P>0.05)。

(收稿, 1993-06-10 修回, 1993-12-13)

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