0.001). Agreement rate of HBDT was 77.78% with non-specific bronchial— provocation test. The diagnosis index of HBDT was 172.14%. The results showed that the basophil releasability is dependent on IgG levels and plays an important role in the mechanism of asthma due to MDI. Clinical data should be considered when HBDT is used in diagnosis of MDI- asthma.

Key words: diphenylmethane diisocyanate (MDI), occupational asthma, allergy and immunology, human basophil degranulation test (HBDT)

An Experimental Study on the Metabolism of Methyl Bromide by Human Erythrocyte

Zhang Yafei, et al

Metabolism of methyl bromide by human erythrocytes plasma was studied and the decline in concentration of methyl bromide was monitored by gas chromatography—every 15 minutes. About 92% of the subjects showed metabolism of methyl bromide in their erythrocytes, suggesting that the majority of the Chinese population have glutathione S-transferase Rho, the rate is much higher than that in European population as reported by some authors. Pb^{2+}, Cd^{2+} and Hg^{2+} could inhibit the enzymatic metabolism and the inhibition was dose dependent, although no significant difference in their inhibitive effect was found. The measurement of glutathione S-transferase Rho activity can be applied to biomonitor the workers occupationally exposed to monohalogenated methanes. The inhibition of the enzyme by Pb^{2+}, Cd^{2+} and Hg^{2+} may represent the level of exposure to these ions and the damage to the body.

Key words: methyl bromide, glutathione, S-transferase, inhibition,

一起汽车车库内一氧化碳、碳氢化合物急性中毒事故的调查

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谢某，男，30岁，汽车司机；李某，女，30岁，打字员。于1994年6月17日12时左右在该厂小车库内休息，当时室外温度较高，故打开汽车内的空调器，约10多分钟后关闭发动机和空调器。17时20分被人发现，昏倒在车库内。20分钟后送到职业病院进行抢救。当时，二患神志不清，口吐白沫，大小便未失禁，结膜充血，巩膜无黄染，瞳孔等大等圆，口唇无发绀；一人双肺布满湿性罗音，心率100次/分，生理反射存在。入院3小时后，出现脑水肿症状，双上肢痉挛，曾呕吐约50克胃内容物。经脱水、防治感染及对症治疗，5小时后，二人皆恢复神志，问之能答，脱离危险期，17天后治愈出院。

事故发生第二天对现场进行了劳动卫生学调查和模拟试验，仍用二患中毒时使用的面包车。关闭车门，启动汽车发动机和空调器，20分钟后停发动机和空调器。测得车库内空气中一氧化碳浓度为800～900 mg/m³，碳氢化合物9000～10000mg/m³，车内一氧化碳浓度为1800～2000mg/m³，碳氢化合物10000～10400mg/m³。把车库门完全打开半小时后，库内室中央的一氧化碳和碳氢化合物均未检出。

测定证明，中毒为发动机内汽油没有充分燃烧，排出的尾气中含有大量一氧化碳和碳氢化合物所致。

我们测得库内一氧化碳和碳氢化合物分别超过国家标准66.7倍和34.7倍。由于我们所测空气中有害气体浓度是根据中毒者的口诉模拟试验的结果，中毒的实际浓度可能比我们所测的要低。而碳氢化合物具有麻醉作用，可使中毒者呼吸量降低，造成进入人体的毒物减少。

此事应当引起高度重视，以避免此类事件再次发生。