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摘要：在我国四个不同膳食类型地区（河北省、山西省、江苏省和四川省）采集16例急死正常成年男子尸体的心脏血、肝脏、脾脏、睾丸、肋骨5种器官组织样品。采用湿法消解，用ICP-MS法测定其15种稀土元素含量，它在器官组织中的蓄积浓度分别为肝（318.8ng/g）>肋骨（107.9ng/g）>睾丸（30.2ng/g）>脾脏（24.6 ng/g）>血（3.3 ng/mL）；除血和肋骨中的La、Ce外，其余13种稀土元素在上述组织器官的分布模式均符合奥多-哈尔金斯定律；经球粒陨石归一化处理稀土元素在组织器官中的分布模式均存在轻稀土富集重稀土亏损（La N/Sm N>1和Gd N/Yb N>1）。

关键词：稀土元素, 器官组织, 分布模式, 人体

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[Distribution patterns of 15 rare elements in the organs and tissues of chinese adult men](#)

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Abstract: The present study was designed to determine the 15 rare element contents in the blood, liver, spleen, testis and rib of 16 Chinese adult men. All the samples were obtained from healthy adult men who encountered sudden deaths in the 4 areas with different dietary patterns in China (Hebei, Shanxi, Jiangsu and Sichuan provinces). Mixed acid (HNO₃:HClO₄) was added into samples, digested at room temperature over night, then were heated at 180°C. The contents of 15 Rees in all the individual samples were determined by using ICP-MS. The concentrations of 15 Rees in liver, rib, testis, spleen and blood are 318.8ng/g, 107.9ng/g, 30.2ng/g, 24.6 ng/g and 3.3 ng/mL, respectively. The distribution patterns of 15 Rees in the 5 kinds of organs and tissues had similar characteristics, accumulation in Light REEs and deficit in Heavy REEs (La N/Sm N>1 and Gd N/Yb N>1).

Key words: Rare elements, Organs and tissues, Distribution patterns, Body

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