E117 Size-related Comparison between Enzyme Activity and mRNA of the Lactate Dehydrogenase in Fish

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Lactate dehydorgenase is one of the most important glycolytic enzymes concerned anaerobic metabolism. Previous study suggests that the LDH activity in fish muscle is related to the body size and the seasons when they were collected. In the present study LDH activities and mRNA concentrations of white skeletal muscle were measured in fishes, *Moroco oxycephalus,* of various size and the relationships among body size, LDH activity and its mRNA level were analyzed. LDH activities increased as the body size go up. Contrary to that there were no significant correlation between LDH mRNA amount and fish size and also between LDH activity and its mRNA level. These results suggest that LDH activity in white skeletal muscle of this species may be regulated at post-transcriptional level.

E118 Composion of blood proteins in mental retardees caused by genetic disorder

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This research was for investigating the physiological effect caused by genetic disorder of serum protein, serum LDH, and serum CPK were analyzed on Fragile X syndrome patients, carriers, unclassified mental retardees and Down's syndrome patients by cellulose acetate plate electrophoresis. Mean percentages of albumin were 53.70±7.73% for Fragile X syndrome patients, 57.09±7.73% for carriers , 47.33±6.06% for unclassified mental retardees, 50.19±15.72% for Down's syndrome patients. Mean percentages of γ-globulin were 19.64±6.71% for Fragile X syndrome patients, 19.24±3.38% for carriers, 25.66±4.74 for unclassified mental retardees, 23.41±6.08% for Down's syndrome patients. Mean percentages of LDH_3 were 27.76±2.72% for Fragile X syndrome patients, 22.70±2.76% for carriers, 25.42±1.26% for unclassified mental retardees, 27.72±2.58% for Down's syndrome patients. Mean percentages of LDH_4 were 2.70±2.04 for Fragile X syndrome patients, 3.79±2.74% for carriers, so both of them were significantly lower than normal($P<0.05$). Mean percentages of CK-MB were 3.96±5.56% for Fragile X syndrome patients, 8.80±7.92%. Mean percentages of CK-MM were 95.81±5.50% for Fragile X syndrome patients, 91.20±7.92% for carriers. These results showed that significant obnormal compositions of blood proteins might be caused by genetic disorder in Fragile X syndrome patients. However, further analysis of many patients will be needed for clear conclusion.