

212 Isozymes of myosin during regeneration of minced rat muscles

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Native myosin isozymes of rat muscles have been isolated by electrophoresis in nondissociating conditions. Their mobilities (R_f) were measured, using *taenia coli* myosin as an internal standard, and their relative concentrations were determined by computer planimetry of the electrophoretograms. Three isozymes were observed in rat EDL ($R_f = 0.80; 0.83; 0.85$; respective proportions 31, 34 and 35%, $n = 16$), three in rat soleus ($R_f = 0.68; 0.73; 0.76$; respective proportions 71, 26 and 3%, $n = 15$), four in neonatal muscles at birth ($R_f = 0.82; 0.86; 0.90; 0.94$., proportions 32, 44, 18 and 6%, $n = 11$), and four in embryonic muscles three days before birth ($R_f = 0.81; 0.84; 0.87; 0.90$; relative proportions 8, 59, 28 and 5%, $n = 11$). Regenerates of minced EDL or soleus in adult animals had no isozymes the third day after surgery, $n = 6$). They were similar to neonatal muscles 15 days after surgery ($n = 13$) and to adult muscles 60 days after surgery (EDL: $n = 8$; soleus: $n = 7$).

Thus the isomyosin changes during regeneration recapitulate ontogeny.