

原著

血液中 CK-MB 消長の診断的価値に関する統計学的研究

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Statistical Study on Diagnostic Value of CK-MB Variation Blood

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Abstract

Nine hundred and thirty-eight subjects volunteered to participate in these investigations. All were adult males and females (age: 30-64 years old) and were informed of the nature of the investigations and gave informed consent before testing. Subjects consisted of three groups. Group I (641 subjects) was the normal ECG finding but not doubtful of the miocardosis. Group II (197 subjects) was any ECG abnormalities like a arrhythmia but not doubtful of the miocardosis. Group III (100 subjects) was doubtful of the miocardosis but not contraindicated with physical activities. They performed the treadmill running and pedalling of the bicycle ergometer. Blood was taken immediately before and after exercise from an antecubital vein to determine the CK-MB and CK concentration and to compare the ratio of CK-MB to CK. Value of CK-MB/CK was $11.6 \pm 4.85\%$ (Group I before), $11.6 \pm 4.97\%$ (Group I after), $11.6 \pm 4.71\%$ (Group II before), $10.9 \pm 4.16\%$ (Group II after), $11.4 \pm 5.95\%$ (Group III before) and $11.5 \pm 5.66\%$ (Group III after). There was no significant difference in CK-MB/CK between three groups and between before and after exercise. Therefore, we consider that it is not appropriate to have the screening of myocardial infarction under the insistence of Neumeir D. et al (1978) to be over 6%, especially in a public institution of health gathering many and unspecified persons.

要約

30歳から64歳までの成人男女のうち、臨床医学的には若干の異常はあっても、心電図学的には何の所見も無く、心筋障害の疑いは全く無い641名、心電図上不整脈の疑いは観察されるが心筋障害は否定できる197名、心筋障害の疑いはあっても運動を禁忌とする理由の無い者100名の3群について、トレッドミルならびに自転車エルゴメーター負荷等を行った前と後に採血して CK-MB/CK 比を統計学的に検査してみたが、3群間そして前・後値の間に全く有意の差が認められなかった。しかもその値は全て11%前後であった。したがって少なくとも Neumeir D et al の主張する6%を越えるものを心筋梗塞とするという所説をもとに、不特定多数を対象として行う健康増進事業の諸施設の指導を行うことは極めて不適當と言わざるを得ない。
