Detection and clinical significance of thyroid hormone and N-Terminal-proBNP in the blood of patients with heart failure

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[Foundation Project]: Project of science and technology commission of Jiading district, shanghai (grant No. 2013 kw 13)

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Received: 2014-11-03 Revised: 2014-11-16

View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To explore the detection and clinical significance of thyroid hormone and N-Terminal-proBNP in the blood of patients with heart failure. Methods: A total of 109 senile heart failure patients were selected as observation group, then chose 45 elderly patients with cardiovascular whose NYHA heart function were I at the same time as the control group. Patients in observation group were divided into A1 and A2 group according to NYHA heart function classification, and were divided into B1 and B2 group according to occurrence of hospital cardiovascular events. Detected the Free triiodothyronine (FT3), Free thyroxine (FT4) and sensitivity Thyroid Stimulating Hormone (sTSH), NT-proBNP, set the NT-proBNP comparison between the exponential transform IgNT-proBNP comparison. Results: The FT3 in observation group was lower than the control group, while the IgNT-proBNP was higher than the control group, the differences were statistically significant (P < 0.05), there were no statistical significance in FT4 and sTSH between two groups (P > 0.05). The FT3 in A2 group was lower than the A1 group, while the IgNT-proBNP was higher than the A1 group, the differences were statistically significant (P < 0.05), there were no statistical significance of FT4 and sTSH between A1 and A2 groups (P > 0.05). The FT3 in B2 group was lower than the B1 group, while the IgNT-proBNP was higher than the B1 group, the differences were statistically significant (P < 0.05), there were no statistical significance of FT4 and sTSH between B1 and B2 groups (P > 0.05). Conclusion: FT3 in elderly patients with heart failure reduced significantly, while NT-proBNP significantly increased, the level of thyroid hormone and the NT-proBNP are closely related to the severity and prognosis of heart function, have positive clinical significance.

[KEY WORDS] Heart failure; Thyroid hormone; N-Terminal-proBNP