Clinical curative effects of oxygen atomizing inhalation combined with noninvasive ventilation in elderly patients with acute heart failure

JIAO Wei, HU Shi-jun, LIAO Xing-zhi
(Nursing Department, No. 101 Hospital of Chinese PLA, Wuxi, 214044, China)

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[Author]: JIAO Wei (1981-), Mingguang Anhui, M.B., Nurse-in-charge, E-mail: jiaowei101@126.com.
[Correspondence to]: LIAO Xing-zhi (1980-), Male, M.M., Attending physician, E-mail: jiaowei101@126.com.

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

[ABSTRACT] Objective: To study the clinical curative effect of oxygen atomizing inhalation combined with noninvasive ventilation in elderly patients with acute heart failure and related nursing. Methods: A total of 94 elderly patients with acute heart failure who received treatment in emergency center were randomly divided into three groups: group I (31 cases) were treated with conventional high-flow oxygen and aerosol inhalation; group II (31 cases) received the noninvasive positive pressure ventilation and conventional aerosol inhalation; group III (32 cases) was treated with oxygen atomization inhalation and positive pressure ventilation, meanwhile the three groups were given conventional drug therapy. Blood gas analysis (SaO2, PO2, PCO2, and PH), respiratory frequency (RR), cardiac function index (HR, PCWP, SV, EF, and BNP) were observed and compared after treatment. Results: SaO2, PO2, PCO2 increased obviously after treatment, RR significantly decreased after treatment (P < 0.05). (2) After 24 h treatment, SaO2, PO2 in group III were significantly higher than group I, II, the treatment groups (P < 0.05). HBV-DNA negative conversion rate and HBeAg/HBeAb conversion rate in symptomatic groups were significantly higher than that of the supportive treatment groups (χ1² = 5.94, P = 0.038; χ2² = 4.20, P = 0.044). The level of HA, LN, IV-C and PC III in the symptomatic groups were significantly lower than the supportive treatment groups (P < 0.05) and IL-1β and TNF-α was significantly lower than of the support treatment groups (P < 0.05). Conclusions: Adefovir dipivoxil combined with reduced glutathione can reduced cytokine levels in serum, inhibit the inflammatory reaction in the liver, improve the negative rate of hepatitis B virus DNA, improve the degree of fibrosis of liver function and liver cirrhosis, and slow down the disease development.

[KEY WORDS] Inflammatory factor; Adefovir dipivoxil; Reduced glutathione; Posthepatitic cirrhosis