中南大学学报(医学版) 2014, 39(4) 401-407 DOI: 10.11817/j.issn.1672-7347.2014.04.014 ISSN: 1672-7347 CN: 43-1427/R

论著

重症患者全血胶体渗透压影响因素的研究

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摘要：

目的：分析重症患者全血胶体渗透压(colloid osmotic pressure，COP)的影响因素，制定血浆蛋白(plasma protein，PP)的参考值范围，改良COP的预测公式指导临床实践。方法：收集405例重症患者的一般资料和血气分析参数，按COP将患者分为A组(COP≤18mmHg)和B组(COP>18mmHg)，并监测总蛋白(total protein，TP)、白蛋白(Albumin，Alb)、球蛋白(Globumin，Glb)和纤维蛋白原(fibrinogen，FIB)。结果：B组的APACHE II评分显著低于A组(P<0.05)；B组TP，Alb，Glb和FIB水平以及存活率均高于A组(P<0.05)；Alb，Glb和FIB的标准化回归系数依次为0.518，0.283和0.113(P<0.05)；B组各类蛋白的95%参考值范围：Alb>23.3 g/L，Glb 12.6~37.6 g/L和FIB 1.3~8.7 g/L，改良得到预测COP的5个公式。结论：重症患者COP的主要影响因素依次为Alb，Glb和FIB。各类蛋白的参考值范围可指导蛋白制剂的临床使用，改良公式可以初步预测重症患者的COP。

关键词： 重症患者 胶体渗透压 白蛋白 球蛋白 纤维蛋白原

Influencing factors of whole blood colloid osmotic pressure in critically ill patients

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Abstract:

Objective: To analyze the influencing factors of whole blood colloid osmotic pressure (COP) and predict reference range of plasma protein for safe COP to guide clinical infusion of protein in critically ill patients.
Methods: Physical data and blood gas analysis of 405 patients were collected. The patients were divided into 2 groups by COP: group A (COP≤18 mmHg) and group B (COP>18 mmHg). The serum proteins including total protein (TP), albumin (Alb), globumin (Glb) and fibrinogen (FIB) were detected.
Results: APACHE II of group B was significantly lower than that of group A (P<0.05). The survival rate, TP, Alb, Glb and FIB of group B were significantly higher than these of group A (P<0.05). Standardized regression coefficient of Alb, Glb and FIB was 0.518, 0.283 and 0.113 (P<0.05); the 95% reference range of 4 types of protein level in group B: Alb>23.3 g/L, Glb 12.6-37.6 g/L and FIB 1.3-8.7 g/L; 5 reformed equations were made.
Conclusion: The main influencing factors of COP include Alb, Glb and FIB. We can use the reference range of 4 types of protein level to guide the clinical management of protein agents, and

reformed equations can be used to preliminarily forecast COP in critically ill patients.

Keywords: critically ill patients COP Alb Glb FIB

收稿日期 2013-11-04 修回日期 网络版发布日期

DOI: 10.11817/j.issn.1672-7347.2014.04.014

基金项目:

2010年国家重点专科建设项目资金 (卫规财函[2011])。This work was supported by the National Key Specialty Project
Funding, China ([2011]).

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