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Level of lipid peroxides and cuprozinc superoxide dismutase in gastric mucosa and serum of gastrectomized patients

Xu Hongwei, Yan Caijie, Luo Yunsheng, et al. (Department of General Surgery, Xinqiao Hospital, Third Military Medical College, Chongqing, 630037)

Abstract The level of lipid peroxides (LPO) and copper-zinc containing superoxide dismutase (SOD-I) in the gastric mucosa and serum was determined in 141 samples from 25 patients after conventional subtotal gastrectomy (11 cases of Billroth I and 14 cases of Billroth II) and 11 patients after pylorus and antroseromuscular flap preserving gastrectomy (PAFPG). Those of 11 normal subjects were examined likewise to serve as control. It was found that:

1. The average LPO level was much higher and the average SOD-I level much lower in the gastric mucosa after conventional subtotal gastrectomy especially the Billroth type II than in those after PAFPG.
2. In 36 specimens of stump mucosa, the average LPO level was significantly higher in the tissue around the anastomotic ring than in that of the body of the stump; no marked difference of SOD-I level between the 2 was revealed.
3. The LPO value in the stump mucosa was positively correlated to and the SOD-I value negatively correlated to the pH value of gastric juice.

Thess findings suggest that the reaction of oxygen free radicals in the stump-mucosa may be influenced by the intragastric pH or by the type of digestive continuity reconstruction, and that the reaction of free radicals specially lipidperoxidation may play a role in the pathogenesis of the lesions in the anastomotic stoma.

Key words lipid peroxides; superoxide dismutases; gastrectomy; hydrogen-ion concentration; stomach

水痘并发传染性单核细胞增多症一例报告

何富强* 顾长海（第三军医大学西南医院 传染科）630038

患儿，女，3岁。因出疹6d，发热、颈部肿痛2d于1991年6月1日入院。6天前发现全身皮肤散在稀疏的红色丘疹，轻痒，不发热。次日躯干出现水泡疹。曾服板兰根冲剂治疗。起病3日后部分皮疹结痂。入院前2日开始发热，体温38.5℃，伴咽痛，颈部两侧出现肿块，轻痛，无咳嗽等症状。所在幼儿园近期有水痘流行。入院时体温37.8℃，急性热病容。皮肤散在红色丘疹、水疱疹和结痂疹。水疱疹直径约3～5mm，椭圆形，周围有红晕。皮疹以躯干居多，四肢稀少。双侧颈部淋巴结群及颌下淋巴结肿大，左侧显著，最大者2cm×1.5cm，质稍硬，轻度压痛，局部皮肤不红。巩膜不黄。咽部充血，双侧扁桃体Ⅱ°肿大，无脓性分泌物。心肺无特殊发现。腹平软，肝肋下2cm，质软轻压痛，脾侧卧肋下2cm，质软无压痛。入院后共查血相3次，分别为：白细胞总数20×10⁹/L、13×10⁹/L、8.3×10⁹/L，嗜中性细胞0.39、0.34、0.18，淋巴细胞0.45、0.54、0.70，异型淋巴细胞0.13、0.12、0.12。肝功能：SB正常，ALT83u，ZnT6u。HBV感染标志(－)。血清嗜异性凝集试验阳性。经青霉素肌注、板兰根冲剂口服及龙胆紫外涂

* 303医院进修医师

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The study of the relationship between erythrocytic membrane band 3 and acid-base changes in patients with cor pulmonale

Yang Xiaojing, Qian Guisheng, Mao Baoling, et al (Department of Respiratory Diseases, xinqiao Hospital, Third Military Medical College, Chongqing, 630037)

Abstract The changes of erythrocytic membrane band 3 protein and intraerythrocytic and extracrythrocytic gases and electrolytes were studied in 69 cases of cor pulmonale and 50 normal subjects. It was found that in the patients of cor pulmonale accompanied with type II respiratory failure, the relative low level of erythrocytic membrane band 3 protein and the restriction of HCO^-_3/Cl^- exchange were the factors to aggravate CO_2 retention and respiratory acidosis, relative intraerythrocytic alkalosis resulted from the relative increase of intraerythrocytic HCO^-_3 ($[HCO^-_3]_i$), and prompt adminstration of oxygen to cor pulmonale patients with hypoxemia could not only improve extraerythrocytic acid-base imbalance but also increase intraerythcocytic P_iO_2 and the tissue capacity to store oxygen.

Key words Pulmonary heart disease; respiratory insufficiency; erythrocyte membrance; band 3 protein; acid-base imbalance

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皮疹等治疗，第2日全部皮疹加痂，第4日体温正常，第8日肿大的淋巴结明显缩小、脾不能触及、肝功能恢复正常出院。

讨　论

本例病前有水痘接触史，皮疹呈多形性，分布呈向心性，初期无明显发热，这些特点均符合水痘的诊断。但出疹4日后未见继发化脓感染而体温升高、皮疹全部结痂后仍继续发热、扁桃体明显红肿、颈部淋巴结群及肝脾明显肿大、白细胞总数增高、淋巴细胞高达70%，异型淋巴细胞超过10%，均不能单纯用水痘解释，应考虑并发传染性单核细胞增多症。血清嗜异性凝集试验阳性证实了这一诊断。传染性单核细胞增多症也可出现皮疹，但为斑丘疹，而非多形性皮疹，且本例出疹时间与该病不符。水痘早期因淋巴细胞受病毒抗原刺激而发生母细胞转化，可出现少数异型淋巴细胞，一般不超过4%，本型高达12%～13%，显然非水痘所致。水痘并发传染性单核细胞增多症十分少见。两病同存的原因尚不清楚，可能是偶合现象，也可能是V-Z病毒感染诱发体内潜伏的E B病毒活化。本例未经抗病毒化疗两病相继恢复，提示两种病毒在体内可能相互发生干扰。

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