参 考 文 献

1 Steinman RM, Hawiger D, Nussenzweig MC. Tolerogenic dendritic cells. Annu Rev Immunol, 2003, 21:685 - 711.
2 Okada N, Mori N, Koretomo R, et al. Augmentation of the migratory ability of DC-based vaccine into regional lymph nodes by efficient CCR7 gene transduction. Gene Ther, 2005, 12:129 - 139.
3 Lu L, Lee WC, Takayama T, et al. Genetic engineering of dendritic cells to express immunosuppressive molecules (viral IL-10, TGF-beta, and CTLA41g). J Leukoc Biol, 1999, 66:293 - 296.
4 Dietz AB, Bulur PA, Brown CA, et al. Maturation of dendritic cells infected by recombinant adenovirus can be delayed without impact on transgene expression. Gene Ther, 2001, 8:419 - 423.
5 王永权,彭毅志,王强,等.脂质体介导的基因转染对人未成熟树突状细胞成熟特性的影响.中华烧伤杂志,2006,22:203 - 206.
6 Larcher C, Nguyen VA, Furhapter C, et al. Human herpesvirus-8 infection of umbilical cord-blood-derived CD34+ stem cells enhances the immunostimulatory function of their dendritic cell progeny. Exp Dermatol, 2005, 14:41 - 49.
7 王强,彭毅志.小鼠骨髓未成熟树突状细胞体外扩增及鉴定.中华烧伤杂志,2003,19:332 - 335.
8 Commeren DL, Van Soest PL, Karimi K, et al. Paradoxical effects of interleukin-10 on the maturation of murine myeloid dendritic cells. Immunology, 2003, 110:188 - 196.
9 Olszewski WL. Tolerogenic properties of dendritic cells in allografting. Ann Transplant, 2003, 8:5 - 9.
10 Raimondi G, Thomson AW. Dendritic cells, tolerance and therapy of organ allograft rejection. Contrib Nephrol, 2005, 146:105 - 120.
11 Rouard H, Leon A, Klonjkowski B, et al. Adenoviral transduction of human clinical grade immature dendritic cells enhances costimulatory molecule expression and T-cell stimulatory capacity. J Immunol Methods, 2000, 241:69 - 81.
12 Tan PH, Beutelspacher SC, Xue SA, et al. Modulation of human dendritic-cell function following transduction with viral vectors: implications for gene therapy. Blood, 2005, 105:3824 - 3832.
13 Bhattacharyya S, Sen P, Wallet M, et al. Immunoregulation of dendritic cells by IL-10 is mediated through suppression of the PI3K/Akt pathway and of IkappaB kinase activity. Blood, 2004, 104:1100 - 1109.
14 Copland MJ, Baird MA, Rades T, et al. Liposomal delivery of antigen to human dendritic cells. Vaccine, 2003, 21:883 - 890.

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·病例报告·

治疗二氯甲烷烧伤一例

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患者男,22岁,工作时被热二氯甲烷(温度约80 ℃)泄漏喷溅于双眼、右上肢等部位,伤后2 h后用水冲洗创面,并在邻近诊所输液(药名不详),因患者呼吸困难,伤后10 h收入笔者单位。查体:患者睑结膜充血水肿,睁眼困难,咽腔充血,声音嘶哑,自感胸闷,有轻度"三凹征",双肺可闻及干性啰音,烧伤创面主要分布于右上肢及背部。白细胞计数(WBC)18.6 × 10^9/L、红细胞计数(RBC)6.86 × 10^{12}/L、中性粒细胞(GR)0.95、淋巴细胞0.5、血钾4.01 mmol/L、血钠145 mmol/L、血氯113 mmol/L、血钙2.3 mmol/L、二氧化碳结合力34 mmol/L、血尿素氮(BUN)6.40 mmol/L。血气分析:pH 7.43,氧分压80 mm Hg(1 mm Hg = 0.133 kPa),二氧化碳分压34 mm Hg,剩余碱 -4 mmol/L。胸部X线片显示:右肺肺炎。诊断:(1)二氯甲烷烧伤,其中Ⅰ度6%、浅Ⅱ度3% TBSA。(2)双眼烧伤。(3)轻度吸入性损伤合并肺炎。

入院后立即静脉注射地塞米松20 mg,1次/d,持续5 d;静脉滴注能量合剂及头孢哌酮/舒巴坦2.0 g,2次/d;成纤维细胞生长因子(贝复舒,珠海亿胜生物制药有限公司)滴眼,2 h/次,红霉素眼膏涂眼1次/天;3 d内给予持续吸氧,流量为4 L/min;创面清创后外用磺胺嘧啶银锌膏包扎,隔日换药1次,直至创面愈合。伤后第2天,患者背部、右上臂创面出现大小不等的水疱,证实为深Ⅱ度创面,面积为8%、浅Ⅱ度1% TBSA。声音嘶哑加重,双肺可闻及湿性啰音,创面肿胀较甚且渗出多。伤后第5天,病情明显好转,偶见稀薄痰液,双眼视物较以前清晰,水肿逐渐消退,巩膜充血减轻,创面渗出减少。WBC 12.1 × 10^9/L、血小板计数210 × 10^9/L、RBC 5.56 × 10^{12}/L、GR 0.76、血钾4.55 mmol/L、血钠138 mmol/L、血氯108 mmol/L, BUN 3.75 mmol/L。伤后第10天,双肺听诊无湿性啰音,偶可闻及干鸣音,睑结膜充血消失,视物清晰。伤后18 d患者痊愈出院。

讨论 二氯甲烷为无色透明易挥发液体,属低毒类,其蒸气麻醉性强,大量吸入会引起急性中毒,出现鼻腔疼痛、头痛、呕吐等症状。其与皮肤接触时易引起皮炎和烧伤,由于沸点(39.75 ℃)低,蒸气比空气重,遇明火或与灼热物体接触时生成剧毒光气,吸入浓度为90.5 g/m^3 达40 min便可致死[1]。本病例入院后第2天创面由Ⅰ度演变为深Ⅱ度,说明二氯甲烷液体具有刺激性和腐蚀性,如伤后立即用流动水冲洗创面有助于减轻伤情。

目前尚无二氯甲烷的有效解毒剂。因此,接诊此类患者时应详细询问病史、观察致伤物性质,有条件时尽快现场采样进行分析;严密观察吸入性损伤及中毒情况,必要时行预防性气管切开,以免酿成不良后果。从患者吸入性损伤情况看,二氯甲烷的挥发性对呼吸道刺激性较强,应引起重视。

参 考 文 献

1 程能林,主编.溶剂手册.北京:化工工业出版社,2002.195 - 197.

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