

- [18] Husser D, Adams V, Piorkowski C, et al. Chromosome 4q25 variants and atrial fibrillation recurrence after catheter ablation[J]. *J Am Coll Cardiol*, 2010, 55(8):747–53.
- [19] Anselmi C V, Novelli V, Roncarati R, et al. Association of rs2200733 at 4q25 with atrial flutter/fibrillation diseases in an Italian population[J]. *Heart*, 2008, 94(11):1394–1396.
- [20] Harvey R P. Links in the left/right axial pathway[J]. *Cell*, 1998, 94(3):273–276.
- [21] Franco D, Campione M. The role of Pitx2 during cardiac development. Linking left–right signaling and congenital heart diseases[J]. *Trends Cardiovasc. Med*, 2003, 13(4):157–163.
- [22] Poelmann R E, Jongbloed M R M, Adriana C. Gittenberger–de Groot. Pitx2: A Challenging Teenager[J]. *Circ Res*, 2008, 102(7):749–751.
- [23] 毕 昊. 中国汉族人房颤易感基因关联分析及朊蛋白相关疾病治疗药物的筛选研究[D]. 武汉: 华中科技大学, 2010.
- Bi H. Association studies on susceptible genes of atrial fibrillation in the Chinese han population and drug screening for prion–related disease in vitro by protein misfolding cyclic amplification[D]. Huazhong University of Science and Technology, Wuhan, P.R.China, 2010.
- [24] Kasahara H, Usheva A, Ueyama T, et al. Characterization of homo and heterodimerization of cardiac csx/Nkx2.5 homeoprotein[J]. *J Biol Chem*, 2001, 276(7):4570–4580.
- [25] Christoffels V M, Mommersteeg M, Trowe M O, et al. Formation of the venous pole of the heart from an Nkx2–5 negative precursor population requires Tbx18[J]. *Circ Res*, 2006, 98(12):1555–1563.
- [26] Mommersteeg M, Hoogaars W M H, Prall O W J, et al. Molecular pathway for the localized formation of the sinoatrial node[J]. *Circ Res*, 2007, 100(3):354–362.
- [27] Shi L S, Li C, Wang C C, et al. Assessment of association of rs2200733 on chromosome 4q25 with atrial fibrillation and ischemic stroke in a Chinese Han population[J]. *Hum Genet*, 2009, 126(6):843–849.
- [28] Lee K T, Yeh H Y, Tung C P, et al. Association of RS2200733 but Not RS10033464 on 4q25 with atrial fibrillation based on the recessive model in a taiwanese population[J]. *Cardiology*, 2010, 116(3):151–156.
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个案与短篇

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Kleine–Levin 综合征 1 例报道

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Kleine–Levin 综合征 (Kleine–levin syndrome, KLS) 是一种临床上较为少见的疾病, 国内报道病例较少。现将临床收治的 1 例女性病例报道如下。

1 临床资料

患者, 女, 32 岁。因“突发呼之不应 7 h”于 2008 年 5 月 30 日入院。入院 7 h 前患者于夜间睡眠中跌落床下, 仍为熟睡状, 面色正常, 呼吸均匀, 呼之不应, 无头部及身体其他部位外伤, 无恶心、呕吐及二便失禁, 无口角歪斜、口吐白沫、双眼凝视等。家属将其扶到床上仍处于睡眠状, 次日 11:00 后开始逐渐苏醒, 醒后意识清楚, 精神差, 懒言少动, 易激惹, 对发作及跌落床下无记忆。追问病史, 6 年多来平均每月发作 1 次, 发作时睡眠持续时间最长 36 h, 中间可有上厕所及饮食等动作, 完毕后继续睡觉。自诉对以前发作过程中上厕所和进食断续有记忆, 并且在发作后 3 d 左右进食量较平时多两

倍。既往史: 每年春季有皮肤过敏史, 余无特殊。出生史及家族史无特殊。入院查体: 内科查体及神经系统查体未见明显异常。辅助检查: 三大常规检查无异常。肝肾功、血脂、血糖、电解质均正常。脑电图、头颅 CT、头颅 MRI、头颅磁共振波谱分析均未见异常。诊断为: Kleine–Levin 综合征。入院后给予改善循环及都可喜治疗, 治疗 2 周后好转出院。随访 6 月, 仍有发作, 症状类似。

2 讨论

KLS 是一种比较少见的疾病, 二十世纪二三十年代由 Kleine 和 Levin 先后描述, 由此得名, 国内又名周期性嗜睡贪食综合征, 主要临床表现为周期性过度睡眠、食欲亢进、性欲增强等。常在青少年时期发病, 男性多于女性, 患者体型多偏胖。KLS 患者在睡眠发生前有困乏先兆, 睡眠发生后持续时间长, 常常在 1 d 至 1 周左右。其间可以起床吃饭及上厕所, 与人交流少或无, 发作过后 3 d 左右常有进食量增加, 夜间

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- in the hepatocellular cell through p53 and NF- κ B pathways[J].Cell Biol Int, 2011, 35(12):1225-1232.
- [4] Bongiovanni L, Müller E J, Della Salda L. Survivin in skin pathologies[J].Exp Dermatol, 2011, 20(6):457-463.
- [5] Higgins G M, Anderson R M. Experimental pathology of liver. I. Restoration of liver of white rat following partial surgical removal[J].Arch Pathol, 1931, 12:186-202.
- [6] Tamm I, Wang Y, Sausville E, et al. IAP-family protein survivin inhibits caspase activity and apoptosis induced by Fas(CD95), Bax, caspases, and anticancer drugs[J].Cancer Res, 1998, 58(23):5315-5320.
- [7] Lopes R B, Gangeswaran R, McNeish I A, et al. Expression of the I-AP protein family is dysregulated in pancreatic cancer cells and is important for resistance to chemotherapy[J].Int J Cancer, 2007, 120(11):2344-2352.
- [8] Marioni G, D'Alessandro E, Bertolin A, et al. Survivin multifaceted activity in head and neck carcinoma: current evidence and future therapeutic challenges[J].Acta Otolaryngol, 2010, 130(1):4-9.
- [9] Kleinberg L, Fløresen V A, Silins I, et al. Nuclear expression of survivin is associated with improved survival in metastatic ovarian carcinoma[J].Cancer, 2007, 109(2):228-238.
- [10] Grabowski P, Kuhnel T, Muhr-Wilkenshoff F, et al. Prognostic value of nuclear survivin expression in oesophageal squamous cell carcinoma[J].Br J Cancer, 2003, 88(1):115-119.
- [11] Zamparese R, Pannone G, Santoro A, et al. Survivin expression in renal cell carcinoma[J].Cancer Invest, 2008, 26(9):929-935.
- [12] Kobayashi K, Hatano M, Otaki M, et al. Expression of a murine ho-

mologue of the inhibitor of apoptosis protein is related to cell proliferation[J].Proc Natl Acad Sci USA, 1999, 96(4):1457-1462.

[13] Adida C, Crotty P L, McGrath J, et al. Developmentally regulated expression of the novel cancer anti-apoptosis gene Survivin in human and mouse differentiation[J].Am J Pathol, 1998, 152(1):43-49.

[14] 陈平, 李昆, 董家鸿, 等. 肝硬变大鼠肝部分切除术动物模型的制作及评价[J].第三军医大学学报, 2002, 24(4):488-490.

Chen P, Li K, Dong J H, et al. Evaluation on the animal model of cirrhotic rats after partial hepatectomy[J].Acta Academiae Medicinae Militaris Tertiae, 2002, 24(4):488-490.

[15] Li F, Ambrosini G, Chu E Y, et al. Control of apoptosis and mitotic spindle checkpoint by Survivin[J].Nature, 1998, 396(6711):580-584.

[16] Yang D, Welm A, Bishop J M. Cell division and cell survival in the absence of Survivin[J].Proc Natl Acad Sci USA, 2004, 101(42):15100-15105.

[17] 朱红霞, 刘爽, 周翠琦, 等. 抗凋亡基因 Survivin 促进细胞转化的作用机制[J].中华医学杂志, 2002, 82(5):338-340.

Zhu H X, Liu S, Zhou C Q, et al. Anti-apoptosis gene surviving promotes cell growth and transformation[J].National Medical Journal of China, 2002, 82(5):338-340.

[18] 朱红霞, 周翠琦, 张果, 等. 突变型 Survivin 逆转 Hela 细胞恶性表型的研究[J].癌症, 2003, 22(5):467-470.

Zhu H X, Zhou C Q, Zhang G, et al. Survivin mutants reverse the malignancy of Hela cells[J].Chinese Journal of Cancer, 2003, 22(5):467-470.

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睡眠差。多导睡眠检测可见慢波睡眠有部分损害。对全球散在的 186 例病例的回顾性研究发现^[1], KLS 患者中周期性过度睡眠发生率为 100%、认知改变为 96%、进食紊乱为 80%、性欲增强为 43%、强迫症为 29%、情绪低落为 40%。KLS 的具体病因尚不明确。可能与下列因素有关:①下丘脑功能紊乱, 苯基二氢喹啉(Orexin)含量下降;适量的苯基二氢喹啉可以帮助人们保持苏醒状态。有的病例行 SPECT 检查可发现丘脑灌注不足^[2,3];磁共振波谱分析发现脑内代谢降低, 影响了神经传递^[4];②反复感染:KLS 发病前可有困倦、流感样症状,有报道 KLS 患者存在下丘脑的炎性反应,提示反复病毒感染可能与本病有关^[5];③遗传易感性:有报道该病呈现家族聚集性,犹太人中发病率高,推测可能与遗传易感性因素有关^[6]。本病需与以下疾病鉴别:①发作性睡病,本病以不可抵抗的睡眠发作、猝倒、睡眠麻痹和睡眠幻觉四联征为特点,发作持续时间短,一般十几分钟。②癫痫非惊厥性持续状态:该病临床表现为以意识障碍基础上伴或不伴自动症症状,一般持续时间较短,脑电图有癫样放电可鉴别。③器质性复发性嗜睡症:可见于第三脑室肿瘤、脑炎或脑外伤等,神经系统检查和影像学检查可鉴别。KLS 的治疗以支持对症为主,有

研究显示中枢兴奋药或锂对部分病例有效^[3,4],本病预后较好,发病 10 年左右后有自愈倾向。

参 考 文 献

- [1] Arnulf I, Zeitzer J M, File J, et al. Kleine-Levin syndrome: a systematic review of 186 cases in the literature[J].Brain, 2005, 128(pt12):2763-2773.
- [2] Huang Y S, Guilleminault C, Kao P F, et al. SPECT findings in the Kleine-Levin syndrome[J].Sleep, 2005, 28(8):955-960.
- [3] Hong S B, Joo E Y, Tae W S, et al. Episodic diencephalic hypoperfusion in Kleine-Levin syndrome[J].Sleep, 2006, 29(8):1091-1093.
- [4] Poryazova R, Schnepf B, Boesiger P, et al. Magnetic resonance spectroscopy in a patient with Kleine-Levin syndrome[J].Neurol, 2007, 254(10):1445-1446.
- [5] Takrani L B, Cronin D. Kleine-Levin syndrome in a female patient[J].Can Psychiatr Assoc, 1976, 5(21):315-318.
- [6] Arnulf I, Lin L, Gadoth N, et al. Kleine-Levin syndrome: A systematic study of 108 Patients[J].Ann Neurol, 2008, 4(63):482-492.

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