DOI: 10.16016/j.1000-5404.1999.02.011

Effects of dexamethasone on cochlear blood flow reduced by sodium salicylate in guinea pigs

Zhu Jin, Liu Zhaohua (Department of Otorhinolaryngology, Daping Hospital, Third Military Medical University, Chongqing, 400042)

Abstract Objective: To determine the effects of sodium salicylate on cochlear blood flow (CoBF) and explore the mechanism of salicylate ototoxicity. Methods: CoBF was determined with laser Doppler flowmeter in the control group, dexamethasone (Dex)-administered group, salicylate-administered group and Dex-pretreated group before and at the 5th, 10th, 20th and 30th min after the administration. Results: In salicylate-administered group, CoBF began to decline at the 10 min after the administration ($P < 0.05$) while it was significantly decreased at the 20th min as compared with other groups ($P < 0.01$) and reduced by approximately 40% of that before the administration. In Dex-pretreated group, no changes in CoBF was found after the administration of salicylate sodium. However, CoBF was still significantly higher than that in salicylate-administered group ($P < 0.01$). Conclusion: Salicylate sodium can reduce the CoBF, which can be antagonized by Dex. The salicylate ototoxicity might be mediated by abnormal arachidonic acid metabolism in the inner ear.

Key words salicylate ototoxicity; cochlear blood flow; dexamethasone; guinea pig

2例肺梭形细胞癌的影像诊断

Two cases of image diagnosis of spindle cell carcinoma of the lung

戚跃勇* 王文献 张哉根** (第三军医大学附属新桥医院放射科) 重庆, 400037

例 1,男性, 55岁,因咳嗽 2月余,痰血 10 d于 1992年 8月 21日入院。平片示左上肺与肺门相连处见一块影,密度较高,轮廓清楚。侧位片示块影靠后呈团块状,分叶状,边缘整齐。CT示: 左肺上叶后段可见 5 cm× 6.5 cm× 5 cm大小的球形病灶,边缘光整,可见脐凹征。纤维支气管镜检查见左上叶支气管管口被一肿物完全阻塞,表面为坏死组织,活检病理报告"高分化鳞癌浸润"。行左上叶切除术: 病灶位于左肺上叶尖后段, 5.0 cm× 4.7 cm× 4.5 cm大小,与周围组织分界清楚,切面灰白褐色相间,质脆嫩。肺门纵隔无明显肿大的淋巴结。镜检: 梭形细胞弥漫成片,细胞为短梭形、长梭形或不规则形,胞浆淡红,核呈杆状或梭形,可见核分裂相,另外可见鳞癌细胞并见大量淋巴细胞浸润。用 ABC方法作免疫组化染色: 肿瘤对 Vimentin (波纹蛋白)及 CK(角蛋白)和 KP_1(抗人巨噬细胞抗体)均显阳性。患者术后至今已生存了 56个月,未见他处转移灶。

例 2,男性, 49岁,因咳嗽伴痰中带血半年于 1995年 11月 14日入院,体检无阳性发现。平片显示: 右肺下叶背段可见 3 cm× 4 cm× 4.2 cm大小的球形病灶,边界较光整。CT示: 肿块病灶内可见空泡征,纵隔淋巴结肿大合并胸腔少量积液。经皮肺穿刺活检发现"散在低分化癌细胞及巨瘤细胞"。于 1995年 11月 22日行右肺下叶切除术,病灶位于右肺下叶背段, 3.5 cm× 4.0 cm× 3.5 cm大小,累及胸壁,质硬、不活动,切面灰白色。隆突下气管后可及肿大淋巴结,胸腔内有 200 ml淡红色胸水。镜检: 部分肿瘤细胞具有多形性,如梭形或球拍状,胶原纤维多,另一部分为低分化鳞癌细胞。免疫组化: CK阳性, Vimentin阳性。PCNA 80%阳性。EMA弱阳性,术后患者 4个月死于脑转移。

讨论

肺梭形细胞癌,以往多被称为肺肉瘤样癌,癌肉瘤,间变性鳞状上皮癌,假肉瘤样癌,肺肉瘤化癌,纺锤细胞瘤等,命名比较杂乱。近年来,通过光镜、超微结构及免疫组化的研究,大多数作者认为此型肿瘤系肺癌的一个变型[1-3]。Humphrey等[1]认为在肉瘤样成分中表现出上皮组织分化的肺癌应视为梭形细胞癌。

影像学表现为非典型性肿块、不能治愈的肺炎、肺不张、胸膜增厚,或有提示预后不良的肺门淋巴结肿大等征象。多表现为较大的孤立性球形病灶,边界较清楚,常有分叶、脐凹征、空泡征等恶性征象。病灶内多无钙化,病灶周围常无卫星病灶。本2例中分别出现脐凹征和空泡征, 1例有纵隔淋巴结肿大。如发生于支气管腔内的息肉状生长的肺梭形细胞癌,常伴有阻塞性肺炎和肺不张。有报道 1例肺梭形细胞癌胸部平片误诊为支气

(下转 105页)

* 戚跃勇,男, 29岁,住院医师,学士
** 病理科

?1994-2016 China Academic Journal Electronic Publishing House. All rights reserved. http://www.cnki.net

大鼠肝内的扫描电镜观察.寄生虫与医学昆虫学报, 1996, 3(1): 1
2 Vreden S G S, Van Den Broek F M, Oettinger M C, *et al*. Cytokines inhibit the development of the malaria parasite *Plasmodium berghei in vivo*. Eur J Immunol, 1992, 22(9): 2271
3 Seglen P O. Treparation of isolated rat liver cells. Methods Cell Biol, 1976, 13(1): 29
4 王兴相,黄复生.环磷酰胺对大鼠体内约氏疟原虫红外期发育的影响.中国寄生虫学与寄生虫病杂志, 1987, 5(3): 80
5 白咸勇,顾云娣,朱继红,等.生物免疫制剂对大鼠枯否细胞释放过氧化氢的影响.解剖学杂志, 1994, 17(4): 331
6 黄复生,王兴相,况明书,等.枯否细胞、肝细胞对疟原虫子孢子感染和发育的影响.中国寄生虫病防治杂志, 1996, 9(3): 173

(收稿: 1998-03-05;修回: 1998-09-17)
(编辑　仇玉福)

Effects of cytokines and supernatant of cultured activated Kuppfer cells on development of exo-erythrocytic forms of *Plasmodium yoelii* in rats*

Hao Hongxing, Huang Fusheng, Kuang Mingshu, Duan Jianhua (Department of Parasitology, Faculty of Basic Medical Sciences, Third Military Medical University, Chongqing, 400038)

Abstract Objective: To study the effects of IL-1 and IL-6 and supernatant of cultured activated Kuppfer cells on the development of exo-erythrocytic forms (EEFs) of *Plasmodium yoelii* (*P. yoelii*). Methods: Rats were injected intraperitoneally with IL-1, IL-6 or both and inoculated with sporozoites (SP) 3 h later. At the 42nd h after the inoculation, the SP viability and the diameter of EEFs were determined. After the model of *in vitro* culture of hepatic cell-*P. yoelii* was established in rats, the animals were inoculated with SP. At the 2nd h after the inoculation, IL-1, IL-6 and the supernatant of cultured activated Kuppfer cells were added to observe their effects on the development of EEFs of *P. yoelii*. Results: The SP viability of the IL-1 group was decreased to 41.32%. IL-1+ IL-6 group presented the complete inhibition of EEF development. In the IL-6 group, the size of EEFs was much smaller than that in the control ($P < 0.001$) though no significant changes of the SP viability were found. *In vitro*, the percentage of inhibition of the EEF development was 37.8% and 60.6% respectively in the 20 U/ml IL-1 group and 20 U/ml IL-6 group. The development of EEFs was also significantly inhibited in the hepatic cells cultured with the supernatant of the cultured activated Kuppfer cells. Conclusion: IL-1, IL-6 and the supernatant of cultured activated Kuppfer cells can inhibit the EEF development of *P. yoelii*.

Key words IL-1; IL-6; Kuppfer cell; *Plasmodium yoelii*; exo-erythrocytic form; rat

* This project was supported by the National Natural Science Foundation of China, No. 39370630

(上接 102页)

管扩张伴感染,行支气管造影才发现病灶位于 B_3 段支气管腔内。总之,肺梭形细胞癌的影像表现与普通肺癌的影像表现相似,因病例数有限,尚不能总结出它区别于普通肺癌的特征性影像表现。

文献[2]报道如表现为肺周边处钱币样病灶者,其预后较好。也有人认为其预后较相同部位的侵袭性鳞癌要好,发生于下呼吸道向腔内生长的单相梭形细胞癌预后亦较好;具有明显癌成分的"双相"肿瘤或侵及附近组织的,免疫组化对角蛋白反应较强(表明梭形细胞形成不良)的预后较差。此 2例对角蛋白,Vimentin均呈阳性反应,但例 1术后存活已达 56个月,目前仍生存,追其病理表现见以梭形细胞为主,且肿瘤内有大量淋巴细胞浸润,部分支持以上观点,是否与较强的细胞免疫因素有关,尚有待更多的病例证实。本组另一例手术后 4个月死亡。术后常规的放、化疗也是决定治疗效果的一个主要因素。

总之,梭形细胞癌发病率极低,术前多被诊断为肺癌。对此病的探讨,尤其是超微结构及免疫组化等方面的观察,会逐步揭示其临床生物学特征,为选择最有效的治疗方法提供依据。

关键词　梭形细胞癌;肺肿瘤　放射摄影术
中图法分类号　R734.2

参考文献

1 Humphrey P A, Scroggs M W, Roggli V L, *et al*. Pulmonary carcinomas with a sarcomatoid element: An immunocytochemical and ultrastractural analysis. Hum Pathol, 1988, 19(2): 155
2 Ro J Y, Chen J L, Lee J S, *et al*. Sarcomatoid carcinoma of the lung. Cancer, 1992, 69(5): 376
3 雷　鸣,张楚毅.肺癌肉瘤一例报告.第三军医大学学报, 1994, 16(1): 75

(收稿: 1998-04-15;修回: 1998-11-17)
(编辑　仇玉福)

?1994-2016 China Academic Journal Electronic Publishing House. All rights reserved.　http://www.cnki.net