DOI:10.16016/j.1000-5404.1999.10.012

Determination of the viability of firearm wounded and seawater soaked muscles in rabbits

Chen Jing, Lai Xinan, Huang Hong, Wu Guoping, Zhang Liangchao, Li Bingcang (Research Institute of Field Surgery, Third Military Medical University, Chongqing, 40042)

Abstract **Objective**: To determine the viability of firearm wounded and seawater soaked muscles in the thigh of rabbits with the "4C" criteria of surgery. **Methods**: Steel spheres shot with a smooth bore gun hit the thigh of the hind limb of rabbits and then the rabbits were soaked in artificial seawater for 30 min. The viability of the wounded and soaked muscles was assessed with the "4C" criteria (consistency, contractility, circulation-bleeding, and color) in surgery and the proportion of necrotic muscle was measured with image quantitative analysis. The correlation of the micropathological changes of the muscles with the "4C" criteria was calculated with chi square. **Results**: In order to judge the viability of firearm wounded and seawater soaked muscle, its contractility was the most important factor to rely upon and then circulation (bleeding) and consistency of the wounded muscle should be considered. The color of the wounded muscle was least reliable in the judgement of its viability. **Conclusion**: The contractility, circulation (bleeding) and consistency of a firearm wounded and seawater soaked muscle should be considered in order to assess its viability.

Key words seawater soaking; necrotic muscle; firearm wounding; rabbit

文章编号:1000-5404(1999)10-0725-01

家族性多发性神经系统血管母细胞瘤1例报道

Report of a case of familiar poly-hemangioblastoma in nervous system

蒋金妍* 肖文华 (第三军医大学附属西南医院肿瘤科) 重庆,400038

血管母细胞瘤又称血管网状细胞瘤,是颅内较少见的一种良性血管瘤。多数单发,偶见多发。有遗传倾向[1]。

1 临床资料

患者闫某,男性,23岁。因右侧肢体麻木、无力,到四川省人民医院行MRI检查发现:第1~4颈髓肿瘤占位。于1997年7月8日入华西医科大学附一院行枕颈开颅探查肿瘤切除术。术后病理诊断:左小脑、延髓、颈髓血管母细胞瘤。术后第4天始意识不清,颈5以下截瘫。经抢救,意识转清,肢体活动仍困难。1998年12月29日到本院复查MRI示:T_1加权图:颈、胸、腰段脊髓增粗,呈不均质较低信号强度,见管状囊腔存在。T_2加权图:颈、胸、腰段髓内囊肿呈中等或较高信号强度。诊断为:髓内多发性血管母细胞瘤。遂入本科。入院时左上肢肌力Ⅳ级,双下肢肌张力亢进,刺激时双下肢肌肉呈无意识强烈收缩,双膝反射强。入院后予颈胸段主病灶区外照射(6 MV-X线)DT 40 Gy。经放疗后,病情有所缓解。

患者母亲及1姐均以右侧偏瘫起病。行MRI检查诊断为:小脑、延髓、颈髓血管母细胞瘤。母亲未经治疗,已于1988年亡故。其姐开颅活检,病理诊断为血管母细胞瘤。术后曾到本科行颈髓主病灶区外照射,DT 40 Gy。经放疗后右侧肢体活动渐,现生活可自理。

* 蒋金妍,女,24岁,住院医师,学士

2 讨论

本病国内文献报告较少,神经系统多发者尤少见。上海医科大学曾报告100例,多发者仅1例[2]。此一家系3例均多发于神经系统实属罕见。血管母细胞瘤的治疗,单病灶者以手术切除为主;多发者手术难以清除,疗效较差,由于脊髓对放射线耐受性差,亦不宜X刀治疗。外照射可命名血管内皮细胞肿胀,坏死,从而使血管闭塞,对稳定病情有一定疗效。目前国外已有报道,血管生成抑制剂γ干扰素在小鼠体内已有确切的抗母细胞瘤作用[3]。将来怎样将抗新生血管和抗血管生成剂应用于临床,还有待于进一步探究。

关键词 家族性;多发性;血管母细胞瘤
中图法分类号 R739.41 文献标识码:B

参考文献

1 上海医科大学华山医院,瑞金医院.实用神经病学.上海:上海科技出版社,1978.435~436
2 汤钊猷 主编.现代肿瘤学.上海:上海医科大学出版社,1993.1112~1113
3 Burrows F J, Thorpe P E. Eradication of large solid tumorsin mice with an immunotoxin directed against tumor vasculature. Proc Natl Acad Sci USA, 1993, 90(1):8996

(收稿:1999-03-31;修回:1999-08-11)
(编辑 冷怀明)

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