

DOI: 10.13241/j.cnki.pmb.2014.05.031

老年蛛网膜下腔出血的治疗方法和预后分析

程新富 张志强[△] 陈红庆 刘宗霖 程 坤

(解放军 161 中心医院神经外科 湖北 武汉 430010)

摘要 目的:探讨 70 岁以上老年蛛网膜下腔出血患者的治疗方法和预后。**方法:**回顾性分析我院 2006-2012 年收治的 49 例老年蛛网膜下腔出血患者的临床资料及其预后。**结果:**49 例患者入院时 Hunt-Hess 分级: I 级 14 例, II 级 8 例, III 级 6 例, IV 级 6 例, V 级 15 例, 其中 14 例采用开颅动脉瘤夹闭术, 10 例采用血管内介入栓塞术, 25 例采用内科保守治疗。治疗后 6 月, 根据 ADL 量表评价预后(ADL $\geq$ 60 分为预后良好): 内科保守治疗者仅 3 例预后良好, 手术及栓塞术者 17 例预后良好。**结论:**对于老年蛛网膜下腔出血患者而言, 影响患者预后的原因主要是出血导致的脑损伤和症状性脑血管痉挛, 通过手术或栓塞术积极治疗破裂动脉瘤是预后良好的重要因素。

关键词:蛛网膜下腔出血; 老年患者; 治疗; 预后

中图分类号: R743.35 文献标识码: A 文章编号: 1673-6273(2014)05-915-02

Analysis of the Treatment and Prognosis of Elderly Patients with Subarachnoid Hemorrhage

CHENG Xin-fu, ZHANG Zhi-qiang[△], CHEN Hong-qing, LIU Zong-lin, CHENG Kun

(Department of neurosurgery, The 161st Hospital of PLA, Wuhan, Hubei, 430010, China)

ABSTRACT Objective: To analyze the treatment and prognosis of patients over 70 years old with subarachnoid hemorrhage (SAH). **Methods:** A retrospective research was performed on 49 cases of elderly patients with subarachnoid hemorrhage admitted from June 2006 to June 2012 to analyze the treatment and prognosis of elderly patients with subarachnoid hemorrhage. **Results:** The Hunt-Hess grade on admission revealed that 14 patients were Grade I, 8 cases of Grade II, 6 cases of Grade III, 6 cases of Grade IV and 15 cases of Grade V. 14 patients underwent surgical clipping, 10 patients underwent coil embolization, 25 patients received conservative therapy. The overall results evaluated for ADL (activities of daily living) after 6 months were as follows: 3 patients in the conservative group had a favorable outcome (ADL $\geq$ 60), 17 patients in the operative and coil embolization group had favorable outcomes. **Conclusion:** Unfavorable outcomes were caused mainly by primary brain damage and symptomatic vasospasm in elderly SAH patients, radical treatment of ruptured aneurysm by surgical clipping or coil embolization was important to achieve a favorable outcome.

Key words: Subarachnoid hemorrhage; Elderly patient; Treatment; Prognosis

Chinese Library Classification(CLC): R743.35 **Document code:** A

Article ID: 1673-6273(2014)05-915-02

自发性蛛网膜下腔出血是临床常见的神经系统急症之一, 其出血原因最主要是颅内动脉瘤破裂。近年来, 随着人口老龄化以及人们生活水平的提高, 老年人发生蛛网膜下腔出血后对治疗的愿望和治疗效果的要求越来越高。我院自 2006 年 6 月至 2012 年 6 月收治老年动脉瘤性蛛网膜下腔出血患者 49 例, 本研究将分析患者的治疗方法和预后, 以为老年蛛网膜下腔出血患者的治疗提供更多的参考依据。

1 临床资料

1.1 一般资料

本组 49 例患者年龄 70-81 岁, 平均 74.3 岁, 其中男性 20 例, 女性 29 例。发病到入院时间 1 小时到 3 天。

临床表现

以突发头痛伴意识障碍者 15 例, 以癫痫为首发症状者 5 例, 伴有偏瘫, 失语者 18 例, 入院时意识状况表现为嗜睡 6 例, 昏睡 6 例, 昏迷 20 例。入院时 Hunt-Hess 分级: I 级, 14 例, II 级 8 例, III 级 6 例, IV 级 6 例, V 级 15 例。

影像学检查

所有病人入院后均行 3D-CTA 或 DSA 检查证实为颅内动脉瘤破裂出血, 其中形成颅内血肿者 7 例, 合并有脑室内积血者有 9 例, 并发梗阻性脑积水者 8 例。动脉瘤的部位: 颈内动脉(ICA)15 例, 前交通动脉(ACA)15 例, 大脑中动脉(MCA)8 例, 椎基底动脉(VB)11 例。

1.2 治疗方法

所有患者治疗方式根据患者入院时的 Hunt-Hess 分级, 患者全身情况及是否合并严重疾病, 以及家属治疗愿望等决定。对于 Hunt-Hess 分级 V 级, 有严重心肺功能不全, 家属不愿手术者采用内科保守治疗, 但对于 Hunt-Hess 分级 V 级的患者先通过内科保守治疗若患者临床表现好转为 IV 级以下则可以考虑外科治疗, 外科治疗分为开颅动脉瘤夹闭术和血管内介入栓塞

作者简介: 程新富(1962-), 男, 副主任医师, 主要研究方向: 颅脑损伤, 脑出血, 脑肿瘤

[△]通讯作者: 张志强, 电话: 13006386013,

E-mail: jujufaces@foxmail.com

(收稿日期: 2013-06-21 接受日期: 2013-07-16)

术,对于有需要手术清除的颅内血肿,脑室内积血,梗阻性脑积水者均采用显微神经外科手术。前循环动脉瘤主要经翼点入路,小脑后下动脉瘤由枕下正中入路或旁正中入路,基底动脉瘤合并有颈内动脉后交通动脉瘤者采用扩大翼点入路。

2 结果

49 例患者中,25 例采用内科保守治疗,24 例采用外科治疗,其中采用开颅动脉瘤夹闭术 14 例(28.6%),采用血管内栓塞治疗 10 例(20.4%)。Hunt-Hess 分级 I - V 级采用开颅手术者分别是 2、3、3、1、3 例,采用栓塞治疗者分别是 6、2、0、1、1 例,采用内科保守治疗者分别是 6、3、3、4、11 例。治疗后 6 月根据 ADL 量表评定,大于 60 分者为预后良好,小于 60 分者为预后不良。Hunt-Hess 分级 I - III 级者 28 例中预后良好者 18 例(64.3%),IV, V 级者 21 例中预后不良者 19 例(90.5%)。采用开颅手术治疗预后良好者 9 例(64.3%),采用栓塞治疗预后良好者 8 例(80%),采用内科保守治疗预后良好者 3 例(12%)。

3 讨论

颅内动脉瘤破裂是蛛网膜下腔出血最重要的病因,脑动脉瘤破裂未经手术夹闭或血管内栓塞治疗可以引起再出血,最常发生在第一次蛛网膜下腔出血后,早期明确蛛网膜下腔出血病因并作针对性治疗可为相当多的患者避免再出血,提高存活率而赢得时间,目前对于蛛网膜下腔出血后的诊断、治疗规范已经相当成熟^[1-9]。但对于老年患者来说,特别是大于 70 岁的患者,往往由于合并有心血管系统、肺、肾疾病及糖尿病等,另外外科手术的创伤,应激反应等导致手术效果不理想,并发症多,因此对这类患者的外科治疗往往采取谨慎态度^[10-13]。本组中采用开颅手术及栓塞术的患者 24 例,预后良好者 17 例(70.8%)。而内科保守治疗的患者 25 例,预后良好者仅 3 例(12%),说明外科手术治疗明显优于内科保守治疗。开颅手术与栓塞术比较,预后良好者没有显著性差异,但栓塞术具有对患者的创伤小,术后并发症相对较少等优点。由于本组研究的病例数较少,哪种方式更好尚待进一步探索。

患者发病后的 Hunt-Hess 分级是决定治疗方式和预后的最重要因素之一^[1,3,5,9]。本组中 Hunt-Hess 分级 I - II 级 13 例通过手术和栓塞治疗后全部预后良好,而内科保守治疗的 9 例仅 2 例预后良好,III 级者 3 例手术治疗后预后良好者 2 例,保守治疗 3 例预后良好者 1 例,IV, V 级者 19 例中预后不良者 17 例,其中死亡 13 例,手术和栓塞治疗愈后良好各 1 例。这表明对于 Hunt-Hess 分级 I - III 级者,尽管患者年龄大,积极的外科治疗对挽救患者生命,保存神经功能,提高生活质量具有重要意义。由于蛛网膜下腔出血患者若形成颅内较大血肿,脑室积水,严重脑积水,往往导致严重颅内压增高,脑损害,采取手术清除血肿,脑室外引流等措施后颅内压能够迅速降低,出血导致的脑损害可以快速得到控制,因此对于这类患者采取开颅手术的方式可能更为适合。

脑血管痉挛是影响脑动脉瘤患者预后非常重要的因素之一,特别是对于老年患者,由于往往有动脉粥样硬化等导致脑供血不足的因素存在,蛛网膜下腔出血后更容易出现症状性脑血管痉挛,引起严重神经功能障碍,甚至死亡^[14-17]。本组中除常

规应用 3H 疗法(高血压,高血容量,血液稀释)和钙拮抗剂外,手术病人在术中放置脑室或脑池外引流,栓塞病人放置蛛网膜下腔引流等措施以便减少或减轻脑血管痉挛的发生及严重程度,但仍有 5 例发生严重脑梗塞,导致预后不良。另外由于患者年龄大,心肺功能储备不足,治疗过程中由于误吸,长期卧床等容易出现肺部感染,泌尿系感染等并发症,导致死亡和严重残疾。

总之,对于老年蛛网膜下腔出血患者而言,影响患者预后的原因主要是出血导致的脑损伤和症状性脑血管痉挛,通过手术或栓塞术积极治疗破裂动脉瘤是预后良好的重要因素。

参考文献(References)

- [1] Molyneux AJ, Kerr RS, Birks J, et al. Risk of recurrent subarachnoid haemorrhage, death, or dependence and standardised mortality ratios after clipping or coiling of an intracranial aneurysm in the International Subarachnoid Aneurysm Trial (ISAT): long-term follow-up[J]. *Lancet Neurol*, 2009, 8(5):427-433
- [2] Li ZQ, Wang QH, Chen G, et al. Outcomes of Endovascular Coiling versus Surgical Clipping in the Treatment of Ruptured Intracranial Aneurysms[J]. *J Int Med Res*, 2012, 40(6):2145-2151
- [3] Froehler MT. Endovascular treatment of ruptured intracranial aneurysms[J]. *Curr Neurol Neurosci Rep*, 2013, 13(2):326
- [4] Li H, Pan R, Wang H, Rong X, et al. Clipping versus coiling for ruptured intracranial aneurysms: a systematic review and meta-analysis[J]. *Stroke*, 2013, 44(1):29-37
- [5] Vanzin JR, Mounayer C, Abud DG, et al. Angiographic results in intracranial aneurysms treated with inert platinum coils[J]. *Interv Neuroradiol*, 2012, 18(4):391-400
- [6] Lee WJ, Cho CS. Delayed Self-expansion Phenomenon as a Complication of Neuroform Stent Assisted Coiling for Ruptured Intracranial Aneurysm[J]. *J Cerebrovasc Endovasc Neurosurg*, 2012, 14(3):247-250
- [7] Cho TG, Hwang SN, Nam TK, et al. Salvage surgical treatment for failed endovascular procedure of a blood blister-like aneurysm [J]. *J Cerebrovasc Endovasc Neurosurg*, 2012, 14(2):99-103
- [8] Khan UA, Thapar A, Shalhoub J, et al. Risk of intracerebral aneurysm rupture during carotid revascularization [J]. *J Vasc Surg*, 2012, 56(6):1739-1747
- [9] Kan P, Jahshan S, Yashar P, et al. Feasibility, Safety, and Perioperative Complications Associated With Endovascular Treatment of Selected Ruptured Aneurysms Under Conscious Sedation and Local Anesthesia[J]. *Neurosurgery*, 2013, 72(2):216-220
- [10] Gizewski ER, Gricke S, Wolf A, et al. Endovascular treatment of intracranial aneurysms in patients 65 years or older: clinical outcomes[J]. *AJNR Am J Neuroradiol*, 2008, 29(8):1575-1580
- [11] Proust F, Gerardin E, Derrey S, et al. Interdisciplinary treatment of ruptured cerebral aneurysms in elderly patients [J]. *J Neurosurg*, 2010, 112:1200-1207
- [12] Luo CB, Teng MM, Chang FC, et al. Endovascular embolization of ruptured cerebral aneurysms in patients older than 70 years[J]. *J Clin Neurosci*, 2007, 14(2):127-132
- [13] Tsukasa K, Tadashi S, Takaaki Y, et al. Clinical Study of Single Hospital's Outcomes of the Treatment for Ruptured Intracranial Aneurysms in old aged patients[J]. *Surg Cereb Stroke*, 2011, 39:398-405

(下转第 914 页)

- 12-year prospective cohort study[J]. *Circ J*, 2009, 73(8):1423-1430
- [12] 陈琦玲, 王鸿懿, 孙宁玲. 血浆同型半胱氨酸与冠心病及高血压的相关性研究[J]. *中华老年心血管病杂志*, 2010, 12(3):233-235
Chen Qi-ling, Wang Hong-yi, Sun Ning-ling. Relationship of plasma level of homocysteine with coronary heart disease and essential hypertension [J]. *Chin J Geriatr Heart Brain Vessel Dis*, 2010, 12 (3): 233-235
- [13] 金哲秀, 王崑民, 李南, 等. 血清肌钙蛋白、高敏 C 反应蛋白、基质金属蛋白酶 9、同型半胱氨酸诊断老年急性冠状动脉综合征的价值[J]. *中华临床医师杂志*, 2010, 10(4):1860-1864
Jin Zhe-xiu, Wang Mei-min, Li Nan, et al. Application of serum cardiac troponin I, high-sensitivity C-reactive protein, matrix Metalloproteinases-9 and homocysteic acid in elderly with acute coronary syndrome[J]. *Chin J Clinicians*, 2010, 10(4):1860-1864
- [14] Jee SH, Lee SY, Kim MT. Serum uric acid and risk of death from cancer, cardiovascular disease or all causes in men[J]. *Eur J Cardiovasc Prev Rehabil*, 2004, 11(3):185-191
- [15] Puddu PE, Lanti M, Menotti A, et al. Serum uric acid for short-term prediction of cardiovascular disease incidence in the Gubbio population Study[J]. *Acta Cardio*, 2001, 56(4):243-251
- [16] Strasak A, Ruttmann E, Brant L, et al. Serum uric acid and risk of cardiovascular mortality: a prospective long-term study of 83 683 Austrian men[J]. *Clin Chem*, 2008, 54(2): 273-284
- [17] Brodov Y, Chouraqui P, Goldenberg I, et al. Serum uric acid for risk stratification of patients with coronary artery disease [J]. *Cardiology*, 2009, 114(4): 300-305
- [18] Okura T, Higaki J, Kurata M, et al. Elevated serum uric acid is an independent predictor for cardiovascular events in patients with severe coronary artery stenosis: subanalysis of the Japanese Coronary Artery Disease (JCAD) Study[J]. *Circ J*, 2009, 73(5): 885-891
- [19] Meisinger C, Koenig W, Baumert J, et al. Uric Acid Levels Are Associated With All-Cause and Cardiovascular Disease Mortality Independent of Systemic Inflammation in Men From the General Population: The MONICA/KORA Cohort Study[J]. *Arterioscler Thromb Vasc Biol*, 2008, 28(6): 1186-1192
- [20] 冯纓纓, 孙宜萍, 王蓓芸, 等. 高血压病伴高尿酸血症与冠心病发生的关系分析[J]. *中国医师杂志*, 2005, 7(8):1092-1093
Feng Ying-xu, Sun Yi-ping, Wang Pei-yu, et al. The relationship between coronary artery disease and hypertensive disease with high serum uric acid[J]. *J Chinese Physician*, 2005, 7(8):1092-1093
- [21] 王小娟, 彭卫平. 老年脑梗死患者血清同型半胱氨酸与血糖和脂蛋白及尿酸的关系[J]. *中国全科医学*, 2008, 11(4):335-336
Wang Xiao-juan, Peng Wei-ping, Relationship of serum homocysteine with levels of serum uric acid, blood glucose and lipoproteins in aged patients with stroke [J]. *Chinese General Practice*, 2008, 11(4): 335-336
- (上接第 916 页)
- [14] Chung J, Kim YB, Hong CK, et al. Stent salvage using the Enterprise stent for procedure-related complication during coil embolization of ruptured intracranial aneurysms [J]. *Acta Neurochir (Wien)*, 2013, 155 (2):223-229
- [15] Kim YW, Neal D, Hoh BL. Cerebral aneurysms in pregnancy and delivery: pregnancy and delivery do not increase the risk of aneurysm rupture[J]. *Neurosurgery*, 2013, 72(2):143-150
- [16] Neumann HP, Malinoc A, Bacher J, et al. Characteristics of intracranial aneurysms in the else kr ner-fresenius registry of autosomal dominant polycystic kidney disease[J]. *Cerebrovasc Dis Extra*, 2012, 2(1): 71-79
- [16] Lin N, Ho A, Gross BA, et al. Differences in simple morphological variables in ruptured and unruptured middle cerebral artery aneurysms[J]. *J Neurosurg*, 2012, 117(5):913-919
- [17] Kawaguchi T, Nishimura S, Kanamori M. Distinctive flow pattern of wall shear stress and oscillatory shear index: similarity and dissimilarity in ruptured and unruptured cerebral aneurysm blebs[J]. *J Neurosurg*, 2012, 117(4):774-780