小骨窗经外侧裂入路显微手术治疗高血压基底节区脑出血

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[摘 要] **目的** 探讨小骨窗经外侧裂显微手术治疗高血压性基底节区脑出血疗效。**方法** 选择我院 2013 年 12 月至 2015 年 2 月 30 例出血量在 30 ~ 60 mL 的基底节区出血患者,对其手术过程及疗效进行回顾,总结小骨窗经外侧裂显微手术的方法及技巧,对比分析了传统手术优缺点。**结果** 患者术后 24 h 复查 CT 颅内血肿清除 90% 以上,1 例出现颞叶脑梗塞,无再次出血及死亡病例。患者术后意识恢复良好,通过早期康复治疗,肢体功能、语言功能均不同程度好转。**结论** 小骨窗经侧裂显微镜下清除基底节区中等量血肿具有创伤小、止血彻底、功能保护好等明显优点,可在神经外科手术中推广应用。

[关键词] 小骨窗;经外侧裂入路;显微手术;基底节区脑出血

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Microsurgery treatment with small craniotomy lateral fissure approach for hypertensive basal ganglia intracerebral hemorrhage

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Abstract: Objective To investigate the efficacy of microsurgery treatment with small craniotomy lateral fissure approach for hypertensive basal ganglia intracranial hemorrhage. **Methods** From December 2013 to February 2015, 30 patients with hypertensive basal ganglia intracranial hemorrhage (blood loss within 30 ~ 60 mL) were analyzed respectively. Summarized the methods and techniques of this microsurgery treatment and analyzed its advantages and disadvantages compared with the traditional operation. **Results** The hematomas were excluded more than 90% which were proved by reexamination after opreation. There was one case of temporal lobe infarction, but there was no re-bleed case and death case. The recovery of consciousness is good, and the limb function and language function were improved by early rehabilitation treatment. **Conclusion** Microsurgery treatment with small craniotomy lateral fissure approach for hypertensive basal ganglia intracerebral hemorrhage has the advantages of minimal invasion, complete hematoma removal and low complication and disability rates, which is worthy of promotion and application.

Keywords: small craniotomy; lateral fissure approach; microsurgery; hypertensive basal ganglia intracerebral hemorrhage

高血压脑出血是神经外科最常见的急症,具有发病急,预后差,致残率和病死率高的特点,目前我国该病呈逐年上升趋势[1]。发病部位以基底节区出血最为常见,占所有高血压性脑出血的 60%[2]。基底节区出血是致残率最高的一类脑出血,存活患者绝大部分均遗留不同程度功能障碍。对于基底节区出血量大于 30 mL 的患者,手术是目前最为有效的治疗方法[3]。但传统手术具有时间长,失血量多的缺点。随着医疗技术的不断发展,微创显微手术逐渐被认可。因其对脑组织损伤小,几乎不损伤重要血管,具有血肿清除彻底,安全性高,止血彻底,疗效确切,预后较好等优点,越来越多地应用于临床高血压性基底节脑出血的治疗。第三军医大学新桥医院神经外科和重庆市黔江中心医院神经外科 30 例患者例采用小骨窗经外侧裂显微镜下清除基底节区血肿,效果满意。现报告如下。

1 资料与方法

1.1 临床资料

回顾性分析 2013 年 12 月至 2014 年 12 月收治的 30 例基底节区高血压脑出血患者的临床资料,其中男 18 例,女 12 例,年龄 48 ~ 72 岁,平均 61 岁;左侧 16 例,右侧 14 例。既往明确高血压病史者 24 例,根据 CT 片估算出血量 30 ~ 60 mL 不等,平均 42 mL;手术时间为发病后 2 ~ 8 h。患者临床表现以颅内压增高为主,左侧基底节区出血均伴有不同程度失语,对侧肌力 0 ~ Ⅱ级,术前意识状态清醒或昏睡,术前 GCS 评分 9 ~ 15 分。术前已出现脑疝的病例未入选本组病例中。考虑到手术清除血肿后虽脑压可明显下降,但脑疝患者术后患侧脑肿胀明显,此类患者我们仍推荐大骨瓣开颅清除血肿。

1.2 方法

所有患者采用全麻,耳屏前 1 ~ 2 cm 至颞部“S”形切口,长

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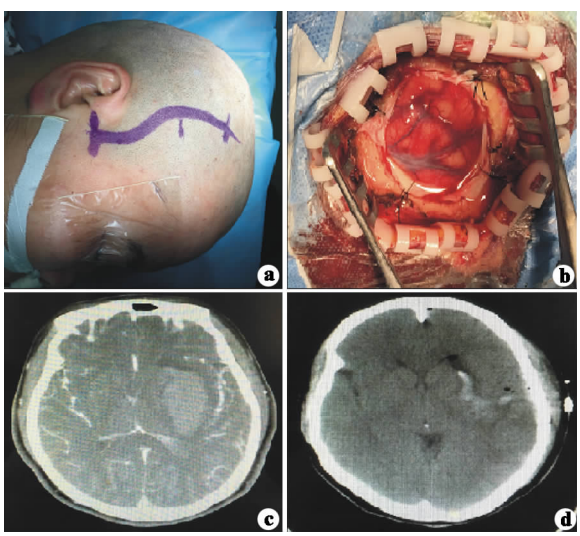
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约 10 cm,颅骨钻孔后铣开 1 个直径 3 ~ 4 cm 圆形小骨窗,“ + ”形剪开硬膜,暴露外侧裂顶部,显微镜下分离外侧裂并向后下方探查,暴露并清除血肿,并在显微镜下直接观察到出血点,方便彻底止血,为术后监测 ICP 可在血肿腔内置入颅内压监护探头,硬膜可严密缝合,还纳骨瓣并用一枚颅骨锁固定。

作“S”形切口对比直切口以利于暴露较大骨窗,手术切口及骨窗选择尽量将侧裂及血肿大部分区域包含在内。在显微镜下分离外侧裂蛛网膜,注意保护外侧裂内走形的大脑中动脉分支,减少双击电凝的使用。基底节区血肿往往在侧裂后下方,分离侧裂后暴露岛叶,切开岛叶后向后下方探查即可打开血肿腔。血肿量较大、脑压较高时可用脑穿针穿刺血肿腔,抽出部分血凝块后脑压可明显下降,以利于更好分离侧裂。显微镜下使用显微剥离子、吸引器清除血肿,减少双极电凝使用,尽量降低对血肿腔周围正常脑组织损害,保护脑功能。基底节区出血点往往位于发自大脑中动脉起始段的豆纹动脉,出血点周围的血凝块质地较韧,此时要注意避免过度牵拉,将血凝块清除后可在显微镜下直视止血。止血后可让麻醉师适当升高血压,观察 10 ~ 20 min,预防潜在出血点术后因血压波动再次出血。适当使用止血材料,但在大脑中动脉走形区域止血材料的使用需谨慎,避免止血材料刺激血管导致术后血管痉挛。

2 结果

所有患者术后意识均完全恢复,复查头颅 CT 血肿均清除 90% 以上,无再次出血病例、无死亡病例,其中 1 例出现颞叶梗塞,通过颅内压监护证实均在正常范围,术后 1 周开始康复治疗,肢体功能、语言功能经康复治疗均不同程度好转。图 1 为典型患者的影像学资料及手术情况。



a:头皮切口;b:骨窗;c:术前 CT;d:术后复查 CT

图 1 典型患者影像学及手术资料

3 讨论

目前治疗高血压脑出血的手术方式很多,主要可分为血肿穿刺碎吸和开颅血肿清除术两大类。血肿穿刺碎吸具有操作简单、损伤小、费用低等优点[4]。目前许多医院采用此种手术方式,尤其是条件有限的基层医院更为常见,但穿刺碎吸手术有穿刺定位不准、无法彻底止血、术后易再次出血、易感染等缺点,不适应于早期血肿不稳定、血压控制差的患者[5]。而开颅血肿清除术多采用颞叶皮层入路,对皮层损伤重,尤其左侧基底节区出血的病例,可能加重语言区进一步损伤[6]。

高血压性脑出血后早期对临近正常脑组织主要以压迫移位损伤为主,出血后 6 ~ 7 h 血清开始渗出及出现脑水肿,此时对正常脑组织的损伤将更为严重。有研究显示,手术时间在 7 h 内,相对于其他两组(7 ~ 24 h和大于 24 h)病例,再次出血率明显增加[7]。目前显微技术已极为成熟,对比血肿穿刺碎吸和开颅血肿清除术,使用显微镜进行血肿清除,具有明显优势。显微镜下具有视野清楚、光源稳定的优点,可将侧裂内走形的大脑中动脉及其分支血管暴露清楚,利于血管保护[8-9]。基底节区出血多见于豆纹动脉内侧支,豆纹动脉自大脑中动脉起点约 1 cm 内发出[10],经侧裂入路,可在显微镜下直视出血点,进而止血彻底,大大降低再出血风险。本组 30 例小骨窗经外侧裂入路显微手术治疗的高血压基底节区脑出血患者,术后无再次出血病例亦证明了其优点。小骨窗经外侧裂入路,较锁孔开颅手术暴露更充分,经外侧裂沟分离脑组织,对脑组织损伤较轻,术中在显微镜下视野清楚,可大大减少双极电凝使用,减少脑组织损害,术后患者功能恢复良好[11],可缩短术后康复时间及费用,减轻家庭负担。术中严密缝合硬膜,避免使用脑膜补片,降低颅内异物,减少感染风险因素,同时骨瓣可还纳固定,保持颅骨完整。

随着现代科学技术的发展,神经外科手术越来越倾向于显微治疗。小骨窗经外侧裂显微手术治疗高血压性基底节区脑出血在对比以往传统手术方式及入路,具有视野清楚、止血彻底、脑组织损伤轻等明显优点,同时能大大降低术后再次出血、脑梗塞的风险,有利于患者术后康复。

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TrACP 在诊断和预测前列腺癌骨转移中的临床意义

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[摘 要] **目的** 研究抗酒石酸酸性磷酸酶在前列腺骨转移患者血清中的变化,探讨其用来诊断和预测前列腺发生骨转移的临床意义。**方法** 以 78 例前列腺癌患者以及 40 例良性前列腺增生患者为研究对象,分为前列腺癌骨转移患者组 41 例(A 组),前列腺癌无骨转移患者组 37 例(B 组),良性前列腺增生患者组 40 例(C 组),同时以 40 例健康青壮年男性作为健康对照组 40 例(D 组)。应用双抗体夹心酶标免疫分析法测定患者血清标本中的 TrACP 水平,结合病理分级、Gleason 评分、PSA、ALP 和 ALT 等进行统计学分析。**结果** 骨转移患者的血清 TrACP 浓度明显高,与其他各组比较差异具有显著性;血清 TrACP 浓度与 PSA 水平有较强的正相关性;ROC 曲线下面积(AUC) 均大于 ALP 和 ALT,且 TrACP 与 PSA 的 ROC 曲线交叉,提示对骨转移的诊断价值较高。**结论** TrACP 的检测对于前列腺癌骨转移具有更直接的诊断价值和预测价值,通过监测前列腺癌患者的血清 TrACP 含量,对了解前列腺癌的生长状态、判断病程进展、预测骨转移的发生具有重要的临床意义。

[关键词] TrACP;前列腺癌;骨转移;诊断
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Clinical significance of TrACP in diagnosis and prediction of bone metastasis in prostate cancer

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Abstract: Objective To study the changes of tartrate resistant acid phosphatase in the serum of patients with bone metastasis in prostate cancer, and to explore its clinical significance for bone metastasis diagnosis and prediction of prostate cancer. **Methods** Seventy-eight cases of prostate cancer and 40 cases of benign prostatic hyperplasia patients as the research object, at the same time, 40 healthy young men as controls, were divided into the group of patients with prostate cancer bone metastases (group A, $n=41$), prostate cancer patients with no bone metastasis group (group B, $n=37$), benign prostatic hyperplasia patient group (group C, $n=40$), healthy control group (group D, $n=40$). Determination of serum TrACP levels in patients with the immunoassay using double antibody sandwich ELISA, combined with pathological grade, Gleason score, PSA, ALP and ALT were statistically analyzed. **Results** The serum TrACP concentration in patients with bone metastasis significantly increased, with significant difference compared with the other groups. The concentration of serum TrACP and PSA levels showed a positive correlation. The area under the ROC curve (AUC) was higher than that in ALT, and the ROC curve of cross TrACP and PSA, suggesting that high value in the diagnosis of bone metastasis. **Conclusion** The detection of TrACP has directly diagnosis and predictive value for prostate cancer with bone metastasis, the serum TrACP content monitoring in patients with prostate cancer has valuable clinical significance in understanding the growth progression status of prostate cancer, judgment and prediction of bone metastases.

Keywords: TrACP; prostate cancer; bone metastases; diagnosis

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