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颞叶内侧胶质瘤的显微手术治疗体会

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摘要 目的:探讨颞叶内侧胶质瘤的显微手术疗效并总结经验。**方法:**回顾性分析 23 例行显微手术治疗的颞叶内侧胶质瘤患者的临床资料及手术并发症的发生情况。**结果:**23 例患者中,20 例全切除,3 例次全切除术,术后术区残血 1 例,无手术死亡病例。术前癫痫发作 18 例,术后缓解 16 例;术前有失语 8 例,后缓解 3 例;术前 8 例偏盲,术后改善 2 例;术前偏瘫 2 例,术后改善 1 例;术后新增失语 2 例,术后新增偏盲 3 例,术后新增偏瘫 1 例,1 年随访复发 3 例。**结论:**经侧裂入路切除颞叶内侧胶质瘤的手术疗效良好,可以最大程度切除肿瘤,并发症较少。

关键词:颞叶内侧胶质瘤;侧裂入路;显微外科手术

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Experience of Microsurgical Treatment on Glioma of Mesial Temporal lobe

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ABSTRACT Objective: To investigate the methods and effects of microsurgical treatment on glioma of mesial temporal lobe, then to sum up experience. **Methods:** The clinical data and surgical complications of 23 cases of mesial temporal lobe glioma treated by microsurgery were analyzed. **Results:** Among these 23 cases, there were 20 cases of total resection, 3 cases of sub-total resection, 1 case of residual blood in the operation area after operation, and no operative death. There were 18 cases of epilepsy before operation and 16 cases of relief after operation. There were 8 cases of aphasia before operation and 3 cases of relief after operation. 8 cases were hemianopsia before operation and 2 cases were improved after operation. There were 2 cases of hemiplegia before operation and 1 case of improvement after operation. There were 2 cases of aphasia, 3 cases of hemianopia and 1 case of hemiplegia. Three cases recurred after one year follow-up. **Conclusion:** Mesial temporal lobe gliomas can be safely and aggressively resected via trans-sylvian approach.

Key words: Glioma of mesial temporal lobe; Trans-sylvian approach; Microsurgical treatment

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前言

胶质瘤是神经外科最常见的恶性肿瘤,而颞叶内侧胶质瘤位置深在,紧邻脑干,与周围海马、钩回、大脑中动脉、大脑后动脉、动眼神经等关系密切,手术难度大。尽管目前可采取多种手术入路切除该部位肿瘤,如经侧裂入路、经皮质入路、经颞下入路、枕下入路等,但是如何做到最大程度切除肿瘤和最小程度的神经功能损伤仍是目前神经外科领域未解决的难题。我科从 2011 年 1 月至 2016 年 1 月对收治的 23 例颞叶内侧胶质瘤患者采取经侧裂入路切除该部位胶质瘤,与国内外文献^[5,6,9-12]结果比较,术后疗效较好,结果报道如下。

1 材料与方法

1.1 一般资料

23 例颞叶内侧胶质瘤中,男 10 例,女 13 例,年龄 21~67

岁,平均 43.2 岁。病程 1 周~6 个月,平均 3.5 周。优势半球 12 例,非优势半球 11 例。术前癫痫发作 18 例,头痛 12 例,失语 8 例,偏盲 2 例。

1.2 影像学检查

所有病例均行头 CT 和头颅 MRI 平扫+增强检查。6 例局限于颞叶内侧,8 例侵及整个颞叶,6 例侵及岛叶,3 例侵及额叶。头 CT 多呈低密度,头颅 MRI 平扫+增强见肿瘤多呈以长 T1 长 T2 为主的混杂信号表现,增强后 T1 强化的 11 例,不明显强化 12 例,周围明显水肿 10 例,肿瘤直径最大 6.2 cm,最小直径 2.9 cm,平均 4.1 cm。

1.3 手术方法

患者均采用常规额颞开颅。显微镜下分离外侧裂,放脑脊液,保护大脑中动脉,切断供血动脉瘤,分离肿瘤,分块切除肿瘤后常规关颅。

2 结果

术后 72 小时内均常规复查头 CT 或头颅 MRI 检查(图 1),其中 20 例全切除,3 例次全切除术,术后术区残血 1 例,无手术死亡病例。术后病理胶质瘤 WHO 分级 II 级 16 例,III~IV 级 7 例。术前有癫痫发作 18 例,缓解 16 例;术前有失语 8 例,

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术后缓解 3 例;术前 8 例偏盲,术后改善 2 例;术前偏瘫 2 例,术后改善 1 例;术后新增失语 2 例,术后新增偏盲 3 例,术后新增偏瘫 1 例,1 年随访复发 3 例。

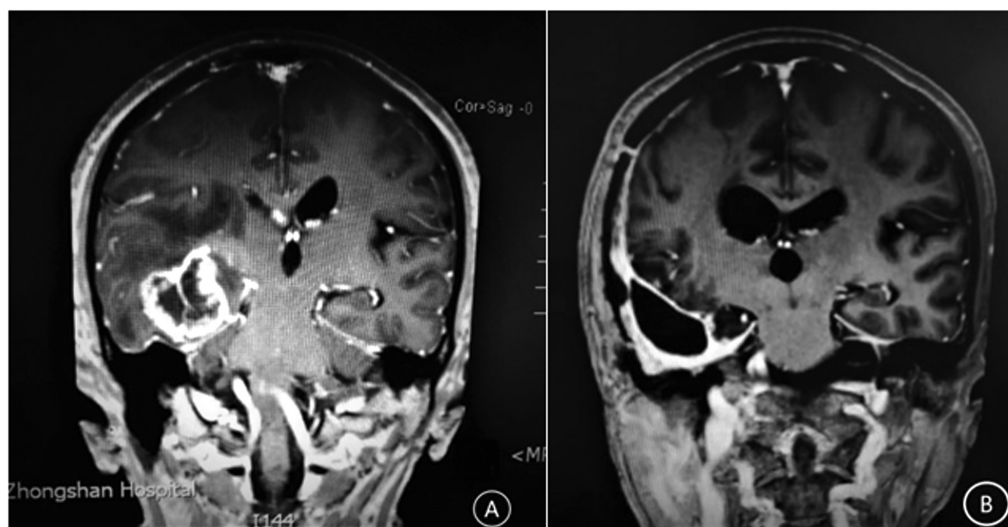


图 1 颞叶内侧胶质瘤手术前后 MRI 增强表现

Fig. 1 Pre- and post-operative images of glioma in the mesial temporal lobe

A :Pre-operative MRI image showed a lesion in the mesial temporal lobe with significant enhanced signals

B :Post-operative MRI image showed the lesion was resected completely.

3 讨论

颞叶内侧结构复杂,主要包括钩回、海马回、海马旁回及侧脑室颞角,且位置深在,与中脑、岛叶、侧裂大脑中动脉比邻,内侧底面与后交通动脉、脉络膜前动脉、大脑后动脉、动眼神经、视束视放射关系紧密^[1-3]。颞叶内侧病变的胶质瘤病理级别多偏低,病程较长,早期可无任何的临床表现,但一大部分患者可以癫痫发作为首发临床表现^[19,20],主要表现为部分性发作,全身痉挛性发作较少见。随着肿瘤体积的增大,其周围重要结构受到刺激可出现记忆力减退,幻嗅,幻听发作。肿瘤侵及优势半球的颞上回后部可出现失语,当肿瘤侵及基底节可出现偏瘫表现,侵及视放射可引起偏盲。肿瘤进一步增大,或合并周围脑水肿时可出现头痛、呕吐、视乳头水肿的颅内压增高表现。本组病例也符合该部位的常见的临床表现,以癫痫发作起病最为常见 18 例(78.26%),随着肿瘤的增大出现颅内压增高头痛表现,12 例(52.17%)。肿瘤侵及颞上回后部出现失语,8 例(34.78%),侵及视放射引起偏盲,2 例(8.7%)。

头颅 MRI+ 增强检查对颞叶内侧胶质瘤的诊断价值最大,可以清晰地显示肿瘤的大小、侵袭范围、与周围组织结构及血管的关系以及肿瘤周围的水肿情况。本组病例低级别胶质瘤多见,多呈长 T1 长 T2 表现,强化不明显,周围水肿较轻,但侵袭范围较广。高级别胶质瘤少见,多有环形不均匀强化。T2 相均可清晰地显示肿瘤与大脑中动脉关系,对于保护大脑中动脉的意义极大。

目前许多文献介绍了切除该部位病变的不同手术入路,如经侧裂入路、经皮质入路、经颞下入路、枕下入路等^[4-6]。Schramm 和 Aliashkevich^[18]根据肿瘤所在的解剖部位、大小和侵及区域将肿瘤分为 A、B、C、D 四型,A 型:仅位于内侧结构,包括:钩突、杏仁核、海马、海马旁回和舌回;B 型:位于内侧基底节的侧

面,但不在外侧皮质内;C 型:A 型+B 型区域;D 型:侵及颞干、岛叶皮质/皮质下区囊及基底节外侧区域。Schramm 认为绝大部分肿瘤属于 A 型,采取经侧裂入路,部分肿瘤属于 B 型,采取颞下入路,C、D 型采取大部颞叶切除^[6]。De Oliveira 等将颞角内侧壁分为前、中、后的三部分的发法^[4],决定手术入路。Yasargil 认为可以采用经侧裂入路切除颞叶内侧所有类型的肿瘤^[5]。Ramin A 采取经皮质赤道入路(肿瘤中间和被覆皮质间的最短入路)切除颞叶内侧胶质瘤^[9]。

我们结合现有的文献和自身的经验,总结如下:(1)采取颞颥皮切口入路,蝶骨嵴及颞骨去除范围尽可能大,尽可能暴露中颅窝底,有利于颞叶的暴露与牵拉。(2)打开侧裂池,尽可能放出脑脊液,使脑叶塌陷,有助于提供更大的空间切除肿瘤。(3)鉴于本组患者大部分为 A 型,加之笔者更熟悉此入路,故采取侧裂入路。打开侧裂可直视侧裂血管,可防术中损伤,另外可以控制肿瘤供血动脉,以减少肿瘤血供;同时方便侵及岛叶的肿瘤切除。(4)清晰地了解解剖位置对于肿瘤切除程度和功能结构保护非常重要^[17]。侧裂血管多由于肿瘤的生长挤向额叶侧,术中分离血管时应注意^[1,5,6]。优势半球的颞叶后部为感觉性语言中枢,多位于侧裂末端,术中需要仔细辨认。视放射位于颞角的顶壁和侧壁,颞角开放后注意该结构的保护。将颞叶内侧的海马钩回及杏仁核切除术后,注意内侧的蛛网膜尽量不要损伤,蛛网膜内侧包含动眼神经、大脑后动脉、脉络膜前动脉以及内侧的中脑,一旦损伤后果严重^[7]。如肿瘤侵及岛叶,应注意基底节区保护,这部分组织会变得脆性增大宜出血,笔者多采用小片凝胶海绵压迫不严重的出血点,谨防电凝越止越深。(5)该部位胶质瘤多为低级别的胶质瘤^[6,8,16],血供并不十分丰富,如术前考虑高级别的胶质瘤,术中需要先中断供瘤血管,单纯颞叶内侧的胶质瘤多为大脑中动脉分支供血,中断血供后肿瘤边界更容易辨别,出血减少,术野更加清晰,从而更容易辨认重要的

解剖结构^[19-23]。(6)另外,高级别胶质瘤恶性程度高,复发较快,如果因肿瘤所在功能区而残留,术后残留的肿瘤会迅速生长^[24-26],继而功能区受损症状会迅速出现,这样不如彻底切除肿瘤,彻底切除肿瘤虽可出现功能障碍,但会显著地延长复发时间,然而这需要术前详细地向授权人交代利弊,如授权人同意可以牺牲相对次要的功能,尤其对于二次手术且术前已知病理为高级别胶质瘤并出现轻度功能障碍的患者,术中切除肿瘤范围尽可能大,故术后新增失语 2 例,新增偏盲 3 例,新增偏瘫 1 例。肿瘤切除术后术区创面彻底止血,止血满意后,严密缝合硬膜,以减少术后脑脊液漏发生。术后均还纳骨瓣。术后根据病理分级及影像学检查结果采取放化疗,最大限度地延缓肿瘤复发时间^[27-29]。

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