

·临床研究论著·

肩关节镜下通过肩峰下间隙切除冈盂切迹囊肿

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【摘要】 目的 探讨肩关节镜下通过肩峰下间隙切除冈盂切迹囊肿的临床疗效。**方法** 回顾性分析 2020 年 1 月至 2020 年 12 月北部战区总医院骨科收治的由于军事训练导致的冈盂切迹囊肿共 11 例。均为男性,年龄为(32.5±5.2)岁(20~46 岁);体重为(74.3±17.7) kg。11 例病人的术前肌电图均无异常,关节活动范围正常,前屈上举或外展上举动作存在疼痛症状,MRI 提示存在冈盂切迹囊肿。全部病例采用关节镜下通过肩峰下间隙切除冈盂切迹囊肿,观察记录术前及术后 12 个月的 Constant-Murley 评分和疼痛视觉模拟量表(VAS)评分,术后 12 个月时通过肩关节 MRI 评估囊肿是否复发。**结果** 随访(12.2±0.8)个月(12~13 个月),手术时间为(58.7±15.7) min(52~67 min)。术后切口均一期愈合。末次随访时,全部病例前屈上举或外展上举的疼痛症状减轻,囊肿均无复发。本组病人术前和术后第 12 个月的 Constant-Murley 评分分别为(42.5±8.7)分、(83.3±6.5)分;VAS 评分分别为(6.7±1.6)分、(1.3±0.8)分;术后评分均较术前显著改善,差异均有统计学意义(P 均<0.05)。**结论** 肩关节镜下通过肩峰下间隙切除冈盂切迹囊肿,安全、简单,疗效满意。

【关键词】 冈盂切迹囊肿;肩;关节镜;微创手术

Spinoglenoid Notch Cyst Resection through the Subacromial Space under Shoulder Arthroscopy. JIN Wen-ming¹, ZHAO Gen², LI Han², LI Bao², SHEN Yang², LIU Xin-wei². ¹Department of Orthopaedics, Northern Theater Command General Hospital, Shenyang 110016, China; ²Postgraduate Training Base, General Hospital of Northern Theater Command, China Medical University, Shenyang 110016, China

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【Abstract】 Objective To explore the clinical efficacy of spinoglenoid notch cyst resection through subacromial space under shoulder arthroscopy. **Methods** A total of 11 cases of spinoglenoid notch cyst caused by military training in Northern Theater Command General Hospital from January 2020 to December 2020 were retrospectively analyzed. All were male, the average age was (32.5±5.2) years (20-46 years), and the average weight was (74.3±17.7) kg. Preoperative electromyography was normal, the range of motion of the joint was normal, there were pain symptoms in flexion and upward lift or abduction, and MRI suggested the presence of spinoglenoid notch cyst. All the patients underwent arthroscopic resection of glenoid notch cyst through subacromial space. Constant-Murley score and visual analogue scale (VAS) were observed and recorded before and 12 months after surgery. MRI of shoulder joint was evaluated 12 months after surgery to determine whether there was any recurrence. **Results** They were followed up for (12.2±0.8) months (12-13 months), and the operation time was (58.7±15.7) min (52-67 min). All the incisions healed in one stage. At the last follow-up, the pain symptoms of all cases were relieved by flexion and abduction lifting, and MRI reexamination showed no recurrence. The Constant-Murley score of patients preoperation and 12 months after operation was 42.5±8.7 and 83.3±6.5 respectively; VAS scores were 6.7±1.6 and 1.3±0.8 respectively. The scores after operation were significantly improved as compared with those before operation, and the differences were statistically significant (P <0.05). **Conclusion** Arthroscopy is a safe, simple and effective method to remove the glenoid notch cyst through the subacromial space.

【Key words】 Spinoglenoid notch cyst; Shoulder; Arthroscopy; Minimally invasive surgery

冈盂切迹囊肿压迫肩胛上神经,可造成外旋活动受限,冈下肌萎缩^[1-2],通常被认为是由于肩关节

上孟唇前向后损伤(Superior labrum anterior and posterior, SLAP)等孟唇损伤形成的单向活瓣机制所导致,即关节内的液体通过该缺口流至孟肱关节外,压迫冈盂切迹内走形的肩胛上神经,引起疼痛、外旋活动受限甚至冈下肌萎缩。

临床上通常采用磁共振明确囊肿的大小及位

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置,上肢肌电图判断是否存在神经损伤,可采用超声引导下穿刺抽吸处理囊肿,但极易复发且效果一般^[3]。因此,对于非手术治疗无效的病人,常优先选择关节镜手术^[4-5]。

本研究通过回顾性分析2020年1月至2020年12月我院收治的11例因冈盂切迹囊肿导致肩关节疼痛和活动受限的病例,评价关节镜下囊肿切除术治疗冈盂切迹囊肿的临床疗效。

资料与方法

一、纳入标准及排除标准

纳入标准:①MRI明确诊断为冈盂切迹囊肿;②肩关节前屈上举或外展上举动作存在疼痛,且保守治疗无明显缓解。

排除标准:①肩关节脱位或肩袖损伤;②肩关节周围骨折或存在神经血管损伤;③随访时间<12个月或失访病例。

二、一般资料

纳入由于军事训练导致的冈盂切迹囊肿病例共11例,均为男性,年龄为(32.5±5.2)岁(20~46岁);体重为(74.3±17.7) kg。11例病人术前肌电图均无异常,关节活动范围正常,前屈上举或外展上举动作存在疼痛症状,MRI提示存在冈盂切迹囊肿。

三、手术方式

病人全身麻醉后取侧卧位。肩关节外展30°,前屈20°,前臂使用牵引架牵引固定。于肩峰后外侧角下方2 cm,内侧1.5 cm,常规建立后方入路探查肩关节。探查可见SLAP损伤,肱二头肌长头腱充血严重,简单使用等离子清理炎性滑膜组织,不使用锚钉缝合盂唇或固定肱二头肌长头腱根部。随后建立附加Wilmington入路和常规前方入路,Wilmington入路位于肩峰后外侧角前方1 cm,下方1 cm位置^[1]。首先使用刨刀清理盂肱关节内增生的滑膜,射频等离子稳定盂唇复合体损伤,随后进入肩峰下间隙内操作。找到肩胛冈,采用Wilmington入路使用交换棒逐层钝性分离冈上肌与冈下肌间隙,后方入路进行观察,前外侧入路辅助剥离组织,直到完全显露囊肿位置,切除囊壁,注意避免损伤肩胛上神经,缝合切口,置入引流管后手术结束。

11例病人中,多数为SLAP II型损伤,仅1例为SLAP IV型损伤,2例伴随后上盂唇损伤,因此这3例需要先修复盂唇复合体,使用直径2.9 mm带线锚钉(施乐辉公司,美国)于10点位置置入,缝合修复盂唇复合体,再通过肩峰下间隙处理冈盂切迹囊肿。

四、术后康复训练

单纯囊肿切除术后常规消炎止痛治疗,术后1周内给予冰敷。术后第2天开始行肩关节主、被动活动训练。对于进行了盂唇缝合的病例给予肩关节外展包固定,术后第2天进行被动活动练习,4周后主动活动,6周后进行肌肉力量训练。

五、评价标准

观察记录全部病例术前及术后第12个月的Constant-Murley评分和疼痛视觉模拟量表(VAS)评分;术后12个月时,根据肩关节MRI评估判断是否存在囊肿复发。

六、统计学分析

采用SPSS 21.0统计软件(IBM公司,美国)进行分析。计量资料以均数±标准差($\bar{x} \pm s$)表示,手术前后Constant-Murley评分、VAS评分等指标的两两比较采用配对样本 t 检验。检验水准 α 值取双侧0.05。

结 果

11例病例随访(12.2±0.8)个月(12~13个月),手术时间为(58.7±15.7) min(52~67 min)。术后切口均一期愈合,未出现感染或深静脉血栓形成等并发症。随访期间,病人肩关节活动范围均正常,前屈上举或外展上举动作的疼痛症状减轻;末次随访时,MRI复查结果显示冈盂切迹囊肿均无复发。

本组病人术前Constant-Murley评分为(42.5±8.7)分,术后12个月时的评分为(83.3±6.5)分;术前VAS评分为(6.7±1.6)分,术后为(1.3±0.8)分;术前术后评分比较,差异均有统计学意义(P 均<0.05)。

典型病例见图1。

讨 论

多数报道认为冈盂切迹囊肿主要是由于盂唇复合体损伤(大部分是SLAP损伤)引起^[6-7],采用盂唇复合体修复术联合冈盂切迹囊肿切除术可以取得较好的临床效果^[8-9],如果不修复盂唇复合体,囊肿复发率较高^[5,10-12]。但是本研究中,仅有1例病人存在SLAP IV型损伤,2例病人存在后上盂唇损伤,需要明确修复,其余病例均未发现明确的盂唇复合体损伤,因此笔者认为不一定所有的冈盂切迹囊肿都是由于盂唇损伤引起。对于SLAP II、III型损伤修复的争议较大,有研究表明,如果使用锚钉缝合盂唇或固定肱二头肌长头腱根部,会导致术后肩关节活动疼痛、关节僵硬^[13-14],因此笔者针对该损伤进行简单清理,并未采用锚钉修复。

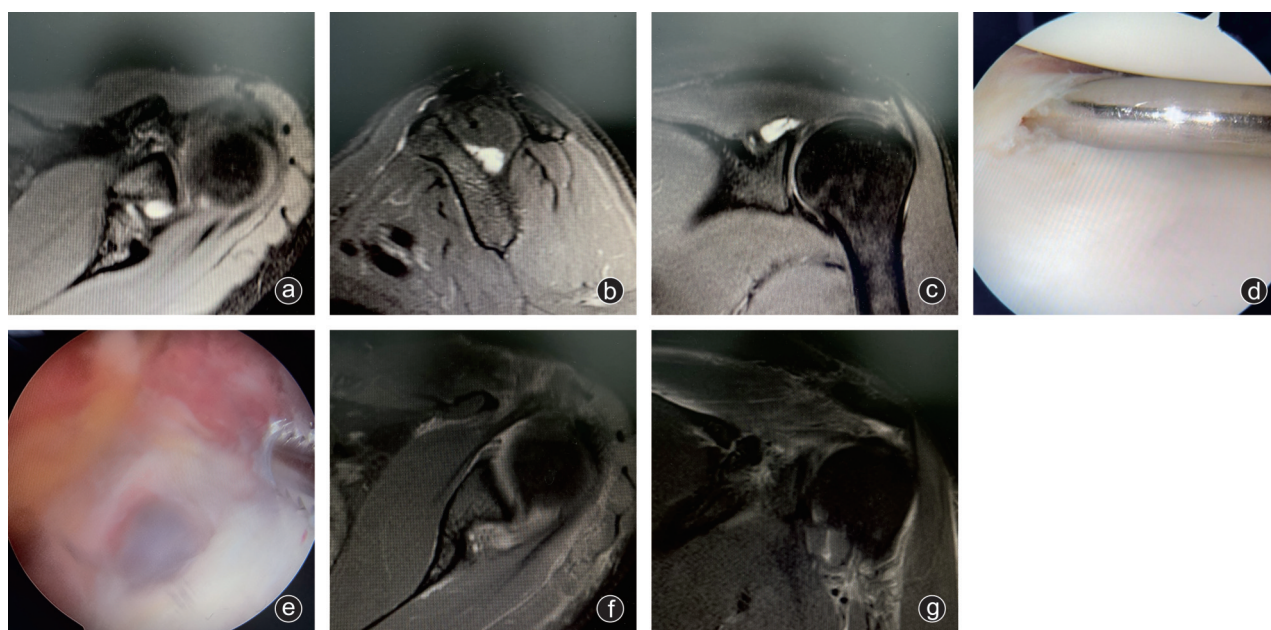


图1 病人,男,32岁,左肩关节冈孟切迹囊肿 a~c:术前MRI提示左肩冈孟切迹囊肿;d:关节镜位于盂肱关节内,镜下诊断盂唇损伤;e:关节镜位于肩峰下间隙,逐层分离冈上、冈下肌间隙,显露囊肿;f、g:术后3 d MRI示囊肿清除彻底

目前,关节镜下冈孟切迹囊肿切除术主要有两种方式^[4,15]。

第一种是经盂唇损伤裂口,插入器械切除囊肿。大多数报道都赞成通过盂唇缺损进行间接囊肿减压,然后进行SLAP修复^[12,16]。但是既往研究认为该方法的局限性在于:①只有存在关节内盂唇损伤,且损伤范围足够大时才能插入器械进行清理,很可能造成不必要的医源性损伤,进一步扩大盂唇损伤的范围;②该方法视野盲区很大,不能完全暴露囊肿,类似于肩窝囊肿的内引流技术,且不能完全切除囊壁,容易导致囊肿复发^[12,17-18]。其优点是:①不需要过大地剥离软组织;②可以直接修复盂唇损伤。然而本研究选取的病例中盂唇损伤不明确,所以不适用该方法。

另一种方式是经肩峰下切除囊肿,有以下优势:①能够完全显露囊肿内壁,同时清晰明确肩胛上神经的位置,不易损伤;②操作空间大,可完全切除囊壁,且囊肿不容易复发,效果较好;③无需过度损伤盂唇,造成额外的医源性损伤;④应用范围广,可以在没有明确盂唇损伤的病例中进行^[19-20]。局限性在于对软组织的损伤较大。我们手术方式的选择为经肩峰下逐层分离冈上、冈下肌间隙行囊肿切除术,且术后Constant-Murley评分为(83.3±6.5)分,术后VAS评分为(1.3±0.8)分,较术前均有显著改善,差异有统计学意义(P 均 <0.05)。因此我们认为该方法与经盂唇裂口切除囊肿的方法相比,更简单、安全且效

果较好。

综上所述,肩关节镜下通过肩峰下间隙切除冈孟切迹囊肿,安全、简单、疗效满意。本文仅介绍相关手术经验,后续的随访时间较短,病例数较少,因此需要更多的典型病例、更长随访时间的深入研究。

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