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文献综述 REVIEW

括约肌间瘘管结扎术治疗复杂性肛瘘

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Ligation of intersphincteric fistula tract for treatment of complex anal fistula

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Abstract
Ligation of intershpincteric fistula tract (LIFT) is a novel surgical procedure for complex fistula, especially transsphincteric fistula which was first proposed by Thailand doctor Rojanasakul. This sphincter-saving procedure has a high success rate, and more importantly, a very low continence rate. Recent clinical research of LIFT has showed that its efficacy varies greatly. In this article, we will review the recent advances in research on ligation of intershpincteric fistula tract for complex anal fistula.

Key Words: Complex fistula; Ligation of intershpincteric fistula tract; Continence rate; Success rate

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摘要
括约肌间瘘管结扎术(ligation of intershpincteric fistula tract, LIFT)是治疗复杂性肛瘘, 特别是经括约肌肛瘘的新术式. 2007年由泰国医生Rojanasakul首次提出, 其优势在于早期治愈率高, 且肛门失禁率为零, 而且完全保留括约肌. 近几年来, LIFT手术的临床研究表明其疗效差异较大. 本文试对LIFT手术的临床研究现状作一综述.

关键词: 复杂性肛瘘; 括约肌间瘘管结扎术; 失禁率; 治愈率

核心提示: 括约肌间瘘管结扎术(ligation of intershpincteric fistula tract, LIFT)能较好解决上述问题, 但其长期临床疗效还有待研究. 本文综述自LIFT术出现以来的相关文献报道, 对LIFT术的优势有了初步认识, 但目前报道的多为单个中心的小量病例报道, 因此需要多中心随机对照研究对LIFT手术的有效性和安全性作出准确的评价.

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0 引言
肛瘘是肛肠科中一种常见而又十分棘手的疾病, 对于大部分简单性肛瘘[1,2], 肛瘘切开术即可获效, 而对于复杂性肛瘘[1,2]而言, 则需要更好的处理好治愈、复发与肛门失禁等并发症之间的矛盾[3]. 传统的瘘管切开术在肛瘘治疗的肛门失禁率在0%-44%[4,5]. 切割挂线术在治疗肛瘘的肛门

■背景资料
在治疗复杂性肛瘘手术中, 引流挂线肛门失禁率低, 但是复发率高, 且缺少循证医学的支持, 直肠黏膜瓣、纤维蛋白胶和AFP技术治疗肛瘘导致肛门失禁的风险低, 但复发率相对较高, 且对术者技术要求较高.

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■研发前沿
括约肌间瘘管结扎术(ligation of intershpincteric fistula tract, LIFT)作为全括约肌保留手术, 其最大的优势在于很大程度上减少术后肛门失禁率, 但LITF术对经括约肌肛瘘的治愈率差异较大, 并且LIFT术易于形成括约肌间瘘, 且并不能提高直肠黏膜瓣推移术的疗效. 此外, 除低位经括约肌瘘外, LIFT术对于其他类型肛瘘(如括约肌上瘘、直肠阴道瘘等)的治疗效果如何也缺乏有效数据, 无法判断其对各型肛瘘具体疗效.

失禁率较高[6-9], 特别是高位复杂性肛瘘[10,11]. 而在保留括约肌的术式中, 生物蛋白胶与传统的切割挂线术相比, 其失禁率低[12,13]. 但是临床报道的治愈率差异很大[14-16]. 在高位肛瘘中治愈率低[15-18]. 在长期的随访中其复发率上升[19,20]. 而肛瘘栓的治愈率在24%-92%[21,22]. Soltani等[23]进行的一项系统分析认为直肠黏 膜推移瓣对肛腺源性肛瘘的治愈率和肛门失禁率为80.8%、13.2%. 对于直肠阴道瘘来说, 直肠黏膜推移瓣及肛瘘栓的效果也不理想[22,24-26]. 括约肌间瘘管结扎术(ligation of intershpincteric fistula tract, LIFT)是由泰国医生Rojanasakul等[27]2007年首次提出, 其原理是肛腺感染是肛瘘发生的始动因素, 将括约肌间瘘管结扎后切断了肛瘘感染和复发的源头; 在手术时切开括约肌间沟、定位括约肌间瘘管、结扎括约肌间瘘管, 切除远端瘘管, 搔刮外侧瘘管坏死组织, 从而切断肛腺感染源头, 清除坏死组织以达到治愈肛瘘的效果[27,28].

1 LIFT手术的适应证

LIFT手术适应证文献报道最多的是经括约肌肛瘘, 在泰国医生Rojanasakul[27]首次使用LIFT手术治疗经括约肌肛瘘的研究中, 最长随访半年, 其治愈率在94.4%. 其后的临床研究中, LIFT治疗经括约肌肛瘘、括约肌间肛瘘、括约肌上肛瘘的临床报道中, 治愈率存在较大差异[29,30]. 对于复发性肛瘘、曾接受过肛瘘手术的肛瘘患者, 其经LIFT手术后, 与初次接受LIFT手术患者相比而言治愈率降低, 但是其术后无明显肛门失禁[29-31]. 对于行LIFT手术失败的患者, 对其后的再次手术治疗不会产生负面影响, 对于此类患者而言, LIFT手术是相对安全有效的[29,32].

2 LIFT手术禁忌证

LIFT术要求肛瘘管道条索清晰明确, 急性脓肿和炎症期为禁忌症. 非肛腺源性的复杂性肛瘘如克罗恩病引起的肛瘘[33,34], 特别是直肠阴道瘘不宜行LIFT术[35-38]. 一般认为, LIFT手术治疗的复发率在8%-40%, 但是没有特别严重的并发症[30,31,39], 而且在临床文献报道中, 其失禁率几乎为0, 2012年, Han等[31]报道中, 5%出现轻度肛门失禁症状.

3 LIFT手术的治疗效果

2007年泰国医生Rojanasakul等[27]运用LIFT手术, 治疗18例肛瘘患者, 随访半年时间, 94.4%(17/18)患者愈合, 5.6%(1/18)患者未愈合, 平均愈合时间为4 wk, 未出现肛门失禁症状, 他的报道表明括约肌间肛瘘结扎术治疗经括约肌肛瘘是安全有效的, 同时保留了肛门括约肌和肛门功能, 而且无肛门失禁症状出现. 2010年, Bleier等[29]回顾性报道了39例经括约肌肛瘘或括约肌上肛瘘患者经LIFT手术, 随访一年半, 90%(35/39)随访完全, 74%(29/39)患者有手术史, 术后20 wk, 57%(20/35)患者瘘管完全关闭, 术后无肛门失禁症状出现. 2010年, Ellis等[36]提出了BioLIFT术式, 采用生物补片对外瘘管进行填塞, 利用生物材料在两瘘管断端间形成一个物理屏障, 且该材料具有一定的抗感染能力, 无排斥性, 能与宿主结构很好融合, 从而提高手术的成功率, 减少愈合时间, 研究涉及31例肛瘘患者, 随访至少1年, 94%(29/31)患者临床痊愈, 其潜在的缺点仍然是操作繁琐, 并在括约肌间需进行广泛的游离, 且价格昂贵. 2011年, Tan等[30]回顾性分析了93例肛瘘患者, 平均随访23 wk(1-85 wk), 其中7例治疗失败, 6例复发, 平均愈合时间为4 wk, 13例未愈合的患者经再次LIFT手术1年后愈合率为78%; 7例治疗失败的患者中, 4例患者内口未愈, 3例为括约肌间的创伤, 6例复发的患者中, 平均复发时间为LIFT术后22 wk, 超声内镜显示内外口间的括约肌间瘘管创伤显著, 治疗未愈的患者经过再次的LIFT、肛瘘切开术或者推移瓣手术后均愈合, 说明早期未愈的LIFT手术患者可接受再次的手术治疗后得到很好的结果, 而且不出现肛门失禁现象. 2012年, Mushaya等[32]报道了前期经引流挂线患者行LIFT手术的复杂性肛瘘患者(克罗恩病患者除外), 并与直肠推移瓣手术进行对比, 在引流挂线结束后, 25例LIFT手术患者及14例推移瓣手术患者术后6 mo内均未出现复发及脓肿出现, 19 mo内, 8%(2/25)LIFT手术患者出现复发, 7%(1/14)推移瓣手术患者出现复发, 7%(1/14)推移瓣手术患者出现轻度肛门失禁. 引流挂线后行LIFT手术与推移瓣手术相比在复发率方面无明显差异, 但LIFT手术后无肛门失禁. 2012年, Abcarian等[43]报道了40例不宜行低位肛瘘切开术的经括约肌肛瘘患者, 经LIFT手术后平均随访18周, 74%患者痊愈, 初次接受LIFT手术患者初次治愈率为90%, 说明LIFT手术的愈合率与患者的曾经的肛瘘手术史有关. 2012年, Han等[31]研究了21例经BioLIFT联合肛瘘栓的经括约肌肛瘘患者, 术后未见严重并发症, 平均随访

表 1 LIFT手术治疗肛瘘的疗效回顾

作者	年份	研究类型	*n*	分类	术前手术史(%)	愈合率(%)	复发率(%)	失禁率(%)	随访时间
Rojanasakul[27]	2007	前瞻性	18	经括约肌肛瘘	n.a	94.4		0	6 mo
Bleier[29]	2010	前瞻性	39	经括约肌、括约肌上	74	57		0	20 wk
Ellis[36]	2010	回顾性	31	复杂性肛瘘	n.a	94		0	1 yr
Aboulian[43]	2011	回顾性	25	高位经括约肌肛瘘	n.a	68		0	24(8–52) wk
Ooi[44]	2012	回顾性	25	复杂性肛瘘	40	68	28	0	22(3–43) wk
Sileri[33]	2011	前瞻性	18	复杂性肛瘘	n.a	83	17	0	4 mo
Mushaya等[32]	2012	回顾性	25	复杂性肛瘘	n.a	92	8	0	19 mo
Abcarian等[41]	2012	回顾性	40	经括约肌肛瘘	n.a	74		0	18 wk
van Onkelen等[40]	2012	回顾性	22	低位经括约肌肛瘘	n.a	82		0	19.5 mo
Wallin等[45]	2012	回顾性	93	经括约肌肛瘘	32	40		5	19 mo
Han等[31]	2012	回顾性	21	经括约肌肛瘘	n.a	95		0	14(12–15) mo
Lehmann等[46]	2013	回顾性	17	经括约肌肛瘘	100	65	40	0	16(5–27) mo
Liu等[42]	2013	回顾性	38	经括约肌肛瘘	n.a	61		0	26(3–44) mo

n.a: No available.

■相关报道

2007年泰国学者Rojanasakul等设计了经括约肌间瘘管结扎术(LIFT)治疗肛瘘, 这种手术方法为全括约肌保留术式, 经初步临床观察, 治愈率为94.4%, 且无肛门功能受损症状. LIFT术受到众多学者的广泛关注, 近年来国外许多学者采用这种方法进行肛瘘治疗, 但疗效差异较大, 复发原因不明, 对LIFT适应证也存在一定的争议.

14 mo, 愈合率为95%(20/21), 5%(1/21)出现轻度肛门失禁, Wexner评分为: 2013年Liu等[42]回顾性分析了38例经LIFT手术的肛瘘患者, 平均随访26 mo, 68%(26/38)的患者随访时间长于12 mo, 总体初次愈合率为61%(23/38), 随访12 mo以上患者初次愈合率为62%(16/26); 治疗失败的15例患者中, 80%(12/15)为症状持续或者6 mo内失败, 20%(3/15)为治疗6 mo后失败; 术后无肛门失禁出现, 并且瘘管程度与愈合率成负相关(OR = 0.55, 95%CI: 0.34-0.88, P = 0.11). 对于LIFT手术治疗肛瘘的疗效回顾总结如表1.

4 结论

LIFT手术在治疗复杂性肛瘘的结果是较为理想的, 特别是对于瘘管较为清楚的的经括约肌肛瘘结果更为理想, 术后发生肛门失禁的可能性较低, 手术简单, 简便易行, 便于推广, 具有较好的应用前景[23,27]; 但是目前报道的多为单个中心的小量病例报道, 缺乏较好设计的临床研究, 因此需要多中心的随机对照研究对LIFT手术的有效性和安全性作出准确的评价.

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■创新盘点

LIFT术的设计思路是将括约肌间处的瘘管结扎切除, 这样不仅关闭了粪便残渣进入肛瘘的通道, 而且也消除了括约肌间的感染源. 从括约肌间沟入手进行操作, 对肛门内外括约肌都没有损失, 从而保护肛门功能.

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■同行评价

本文举例充分, 具有一定指导意义.

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