

doi: 10.13241/j.cnki.pmb.2017.21.021

甲状腺再次手术治疗的临床分析*

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摘要 目的:探讨甲状腺再次手术的原因、手术方式的选择和手术效果以及患者的预后情况。**方法:**统计哈尔滨医科大学附属第二医院普外科 2001 年 1 月到 2015 年 9 月期间收治的 1600 例初次行甲状腺手术的患者, 回顾分析其中 175 例再次行甲状腺手术患者的临床资料。**结果:**甲状腺再次手术采用双侧甲状腺次全切除术为 92 例, 单侧甲状腺次全切除术为 72 例, 甲状腺癌根治术为 11 例。甲状腺再次手术患者术后出现甲状腺功能减退、气管和喉返神经损伤、出血以及缺钙引起的手足抽搐等概率高, 与首次手术比较差异有统计学意义($P < 0.05$)。术后 1 年内对再次手术的患者进行随访, 其中复发 12 例(病理确诊为甲状腺癌 3 例, 结节性甲状腺肿 9 例), 其他类型甲状腺疾病无复发。**结论:**甲状腺再次手术较初次手术难度较大, 术中及术后并发症较多, 再次手术应谨慎选择术式及术中精细操作。

关键词: 甲状腺; 再次手术; 并发症

中图分类号: R653 **文献标识码:** A **文章编号:** 1673-6273(2017)21-4086-03

Clinical Analysis of Thyroid Reoperation*

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ABSTRACT Objective: To investigate the causes of thyroid reoperation, the choice of the ways of operation and operation effect and prognosis of patients. **Methods:** Statistics of the second affiliated hospital of Harbin medical university general surgery during January 2001 to September 2015 treated 1600 cases of the first line of the patients with thyroid surgery, retrospective analysis of clinical data of 175 patients with thyroid reoperation. **Results:** Thyroid reoperation with bilateral subtotal thyroidectomy for 92 cases, unilateral subtotal thyroidectomy of 72 cases, radical operation for thyroid cancer for 11 cases. Postoperatively in patients with thyroid reoperation hypothyroidism, trachea and laryngeal recurrent nerve injury, hemorrhage and calcium causes limbs twitch probability is high, compared with surgery for the first time difference was statistically significant ($P < 0.05$). Of reoperation of patients within 1 year of postoperative follow-up, including 12 cases recurrence (pathological diagnosis of thyroid carcinoma 3 cases, 9 cases of nodular goiter), and other types of thyroid disease recurred. **Conclusions:** Thyroid reoperation is complication more than difficult to postoperative, reoperation should be careful to choose operation and intraoperative fine operation.

Key words: Thyroid; Reoperation; Complication

Chinese Library Classification(CLC): R653 **Document code:** A

Article ID: 1673-6273(2017)21-4086-03

前言

随着诊疗水平的提升, 甲状腺疾病的发病率与检出率也随之升高, 相关的治疗措施也日益增多, 但手术仍是其重要的临床治疗方法之一^[1]。目前临床上开展的甲状腺术式也非常多, 如甲状腺根治术、甲状腺全切术、甲状腺次全切除术等给手术治疗甲状腺提供了更多的可选择方式^[2], 但是由各地诊疗水平参差不齐, 如一些基层医院病理检查开展不完善、初次手术术者操作不当等各种原因, 导致再次手术的发生率升高。甲状腺再次手术时, 由于组织粘连、解剖关系的改变等原因导致手术难度远大于初次手术, 故术后出现甲状腺功能减退、气管及喉返

神经损伤、出血、低钙抽搐等并发症的概率也随之升高^[3,4]。本文回顾性分析了 175 例甲状腺再次手术的患者, 就以上并发症问题进行探讨, 旨在分析甲状腺再次手术的特点, 以求解决相关问题。

1 资料与方法

1.1 临床资料

回顾性分析我院 2001 年 1 月到 2015 年 9 月期间收治的甲状腺再次手术患者 175 例, 其中男性 49 例, 女性 126 例; 年龄 17 岁~78 岁, 平均年龄 45.6 ± 14.4 岁; 2 次手术 149 例, 3 次手术 23 例, 4 次手术 3 例; 再次手术距初次手术时间为 15

* 基金项目: 黑龙江省自然科学基金项目(H201407)

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(收稿日期: 2016-12-06 接受日期: 2016-12-29)

天~30年,平均时间为6.46年 $\pm$ 6.59年;疾病类型分别为甲状腺功能亢进43例,结节性甲状腺肿56例,甲状腺肿瘤65例,甲状腺癌11例。

1.2 方法

详细询问病史,了解患者的一般情况,记录患者手术方式、禁忌症以及病理诊断结果等各项临床资料,分析175例患者再次手术原因、术式、术后并发症等情况。

1.3 统计学分析

本次研究使用SPSS14.0软件进行数据统计,计数资料以率表示,采用 χ^2 检验。设 $\alpha=0.05$,当 $P<0.05$ 时,差异有统计学意义。

2 结果

2.1 术式选择

甲状腺再次手术175例,双侧甲状腺次全切除92例占

56.6%,单侧甲状腺次全切除术72例占41.1%,甲状腺癌根治术11例占6.29%。

表1 甲状腺再次手术的术式选择

Table 1 The surgical method of thyroid reoperation

Operation	Cases	Percentage(%)
Bilateral subtotal thyroidectomy	92	56.6
Unilateral subtotal thyroidectomy	72	41.1
Radical operation for thyroid cancer	11	6.29

2.2 不同疾病类型再次手术比例及原因

甲状腺初次手术1600例,再次手术175例,均有病理证实。按照相同病理类型对比,初次甲状腺功能亢进343例,再次43例占12.54%;初次结节性甲状腺肿507例,再次56例占11.05%;初次甲状腺肿瘤586例,再次65例占11.09%;初次甲状腺癌164例,再次11例占6.71%。

表2 不同疾病类型再次手术比例及原因

Table 2 Different type reoperation rate and causes of disease

Disease types	Primary surgery (cases)	Reoperation (cases)	Percentage(%)	Cause
Hyperthyroidism	343	43	12.54	relapse
Nodular goiter	507	56	11.05	relapse
Thyroid tumor	586	65	11.09	relapse
Thyroid cancer	164	11	6.71	relapse
Total	1600	175	10.94	

2.3 初次手术和再次手术并发症比较

甲状腺再次手术患者175例,术后出现甲状腺功能减退48例,气管和喉返神经损伤21例,出血16例以及缺钙引起的手足抽搐21例。初次出现形同并发症的例数分别为80例、60

例、26例、70例、35例。甲状腺再次手术患者术后出现甲状腺功能减退、气管和喉返神经损伤、出血以及缺钙引起的手足抽搐等概率高,与初次手术比较差异有统计学意义($P<0.05$)。

表3 甲状腺初次手术和再次手术并发症比较[n(%)]

Table 3 The thyroid complications compare with primary surgery and reoperation[n(%)]

Groups	Cases	Hypothyroidism	Tracheal injury	Laryngeal recurrent nerve injury	Bleeding	Tetany
Primary surgery	1600	80(5.00)	60(3.75)	26(1.63)	70(4.38)	35(2.19)
Reoperation	175	48(27.43)	21(12.00)	16(9.14)	36(20.57)	21(12.00)
χ^2		22.8741	5.0014	9.6121	19.5474	9.9014

Note: compared with the primary surgery and reoperation $P<0.05$.

2.4 患者复发率

对175例再次行甲状腺手术的患者进行1年的随访,其中复发12例(病理确诊为甲状腺癌3例,结节性甲状腺肿9例),复发率为6.86%,其他类型甲状腺疾病无复发。

3 讨论

甲状腺位于气管的两侧,是人体内最大的内分泌腺体,通过合成及分泌甲状腺激素来保持人体的内环境的稳态^[1]。甲状腺常见的疾病类型有甲状腺功能亢进、结节性甲状腺肿、甲状腺肿瘤、甲状腺癌等,手术治疗甲状腺疾病被越来越多的应用到临床上^[2]。但随之而来的是甲状腺再次手术的发生率也非常高,Wilson^[3]等学者研究发现,术前术式选择欠妥、病灶性质不明、复发等是再次手术的主要原因。本次研究回顾了1600例初

次实施甲状腺手术的患者,其中有175例患者接受了再次手术,再次手术的发生率为10.94%。其中甲状腺功能亢进为12.54%,结节性甲状腺肿为11.05%,甲状腺肿瘤为11.09%,甲状腺癌为6.71%。

我院甲状腺功能亢进再次手术发生率最高,与国内多数报道甲状腺癌发生率最高相对比,我院甲状腺癌再次手术发生率最低。其他类型甲状腺疾病二次手术发生率高可能因为首次手术切除范围不够,残存甲状腺较多,患者对疾病认识不足,多摄入含碘丰富的食物,未能定期复查,二次手术前误诊率高(术后病理证实非癌)等。二次手术术后并发症发生率与国内其他地区大体相同,甲状腺功能减退的发生率最高,与残余甲状腺与周围组织广泛粘连,解剖位置变化,再次手术后无甲状腺残留或残存较少有关。本文旨在通过回顾分析甲状腺手术患者

的临床资料,降低二次手术发生率,降低手术并发症。本文统计较为单一,后续研究还应细化甲状腺癌病理分型,统计手术误诊率。

究其原因,我们推测再次手术的原因可能有以下几点:1:术前对甲状腺的病变范围及程度估计不足,致使病灶切除不完全。主要是因为受限于辅助检查滞后、术者临床经验不足等导致术式选择不当;2:鉴于甲状腺疾病本身的特殊性,术中可能会对病灶性质判断有失偏颇;3:术中快速冰冻病理与术后大病理不一致。值得注意的是,近年来国内外研究认为甲状腺癌的再次手术率是不同甲状腺疾病类型中较高的^[7,9],但是本次研究结果提示甲状腺癌再次手术的发生率低于 10.94%的总体发生率(为 6.71%),具体原因尚未明确。

甲状腺功能减退症是甲状腺再次手术后较常见的并发症之一^[10]。原因是腺体被切除后,甲状腺激素的合成与分泌减少,导致机体的甲状腺激素水平不足而出现相应的临床症状^[11]。在本次研究中,初次手术甲状腺功能减退症的发生率是 5.00%,而再次手术后这一概率上升至 27.43%;气管损伤在甲状腺手术中也比较常见。因为甲状腺紧贴气管两侧这一特殊的解剖位置关系^[12,13],尤其是再次手术时,组织产生粘连,使得器官损伤的概率从初次手术的 3.75%上升到 12.00%;喉返神经损伤也是甲状腺手术常出现的并发症^[14,15]。由于喉返神经处在甲状软骨下方,尤其是在再次手术时,出现瘢痕组织粘连及解剖标志物不易识别^[16],致使喉返神经损伤的概率从初次手术的 1.63%上升到 9.14%;由于甲状腺腺体血运丰富,初次手术时行血管结扎,导致腺体大量侧支循环形成^[17],尤其是再次手术时,出血的概率从初次手术的 4.38%上升到再次手术的 20.57%;而由于低钙原因引起的手足抽搐也从初次手术的 2.19%上升到再次手术的 12.00%,原因可能是甲状旁腺被误切的范围增多所致^[18]。

甲状腺再次手术的并发症不可避免,但是通过完善术常规检查,对甲状腺功能进行准确的评估,术后根据结果适量补充外源性甲状腺激素,就可使甲状腺功能减退症的可能性大大降低^[19];术前仔细检查患者呼吸是否通畅、有无气管移位等异常现象,也可使气管损伤的发生率下降;术中精细、谨慎操作,熟悉甲状腺局部解剖结构,游离出全部喉返神经,尽量纵向分离组织,可降低喉返神经损伤发生的概率;术中分层次对组织实施分离,避免血管损伤,止血彻底,结扎牢靠,也可降低出血的可能性;术中操作时仔细辨认甲状旁腺,保护其血供,若不慎损伤,可将其切碎移植至健侧胸锁乳突肌内以维持机体甲状旁腺激素水平的稳定^[20,21]。

综上所述,甲状腺再次手术的难度大,并发症发生率高,但是严格选择手术适应症,充分术前准备,详尽告知患者及家属手术风险,术中精细操作,术后密切观察病情变化,对并发症采取针对性的防治,可把风险降至最低。

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($P < 0.05$)。出现上述与既往实验不同结果推测可能是二者联合使用后具有协同作用,也进一步说明中西医结合疗法较传统的治疗方法更具优势。

总之, TMZ 联合 HMP 治疗 AMI 的效果较单用 TMZ 更加显著,具有较好的临床运用前景。

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