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高速气涡轮切割手机联合专用加长裂钻对拔除下颌阻生第三磨牙的效果分析*

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摘要 目的：探讨牙科高速气涡轮切割手机配合阻生牙专用加长裂钻拔牙对口腔外科门诊需要拔除下颌阻生第三磨牙患者的影响。**方法**：选取我院收治的59例需要拔除下颌阻生第三磨牙患者，按照随机数字表法将所有患者随机分为试验组和对照组两组。其中试验组患者采用牙科高速气涡轮切割手机辅助阻生牙专用加长裂钻进行拔牙，而对照组患者则采取传统的劈骨分牙法，通过两组患者的术后复诊对患者的下唇麻木、断根等发生率以及张口受限、疼痛、肿胀等情况进行评价。**结果**：根据我院对两组患者的术中情况及术后并发症情况进行统计分析，结果显示试验组患者的手术时间为（25.68± 6.83)min，明显低于对照组患者[(35.23± 14.23)min，t=3.962，P=0.000]。试验组患者中仅有1例术后出现断根情况，无其他并发症出现；而对照组患者术后则有3例断根情况和1例下唇麻木患者(后逐渐缓解)、1例下颌关节疼痛以及1例舌侧骨板骨折患者。根据我院对两组患者术后1d的临床资料进行统计分析，结果显示试验组患者术后1d面部肿胀程度明显比对照组患者轻(P＜0.05)；试验组患者的疼痛情况明显优于对照组患者(P＜0.05)；试验组患者的张口受限程度明显比对照组患者轻(P＜0.05)。**结论**：牙科高速气涡轮切割手机配合阻生牙专用加长裂钻拔牙对口腔外科门诊需要拔除下颌阻生第三磨牙患者具有较好的临床治疗效果，值得在临床上加以广泛推广和运用。

关键词：阻生牙专用加长裂钻；牙科高速气涡轮切割手机；下颌阻生第三磨牙

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Dental High Speed Gas Turbine Cutting Handpiece with Impacted Teeth Special Extended Fissure Bur for Extraction of Impacted Mandibular Third Molars*

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ABSTRACT Objective: To investigate the effects of special extended fissure bur assisted by dental high speed air turbine cutting handpiece on the extraction of impacted mandibular third molar in patients. **Methods:** Selected 59 cases of patients who need extraction of impacted mandibular third molar. According to the random number table method, all patients were randomly divided into two groups, experimental group and control group. The patients in the experimental group had the mandibular third molar extracted by special extended fissure bur assisted with dental high speed air turbine cutting handpiece, while those in control group had traditional chisel method. Evaluate and compare the postoperative incidence of lower lip numbness and root broken, and limitation of mouth opening, pain, swelling, etc. The surgery situation and postoperative complications were analyzed. **Results:** The results showed that the operation time of the experimental group was (25.68 + 6.83) min, significantly lower than that of the control group patients [(35.23+14.23) min, t=3.962, P = 0.000]. There were no complications observed in the experimental group except that one case had the root broken after operation. While in the control group, there were three cases of postoperative root broken, one case of lower lip numbness (gradually eased later), one case of mandibular joint pain and one case of lingual bone plate fracture. According to the clinical data calculated at 1d after operation, the facial swelling degree was significantly lighter in experimental group than in control group (P < 0.05). And the pain of patients in the experimental group was significantly better than in the control group (P<0.05). Patients in the experimental group also had less limitation in mouth opening than those in control group (P<0.05). **Conclusion:** Dental high speed air turbine cutting handpiece with impacted teeth special extended fissure bur had a better clinical therapeutic effect on extraction of mandibular impacted third molars. It is deserved to be widely popularized and applied in clinic.

Key word: Long fissure bur special for impacted tooth; Dental high speed gas turbine cutting handpiece; Impacted mandibular third molar

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前言

临床上最为常见的阻生牙即是下颌第三磨牙,随后为上颌第三磨牙和上颌尖牙[1]。据有关资料报道,阻生牙在成人中的发生率约为 20%[2]。因为阻生牙及其所被覆盖的牙龈之间极易藏污纳垢而滋生细菌,因此阻生牙患者常常会有邻牙龋坏和口臭,同时常有炎症发生[3]。我院选取了 59 例需要拔除下颌阻生第三磨牙患者,采用高速气涡轮切割手机配合阻生牙专用加长裂钻拔除下颌阻生第三磨牙患者的效果分析。

1 资料和方法

1.1 一般资料

选取我院于 2011 年 5 月至 2015 年 9 月期间收治的 59 例需要拔除下颌阻生第三磨牙患者,其中男性患者 26 例,女性患者 33 例,所有患者年龄均处于 18 至 41 岁之间,平均年龄为(29.2± 6.5)岁。按照随机数字表法将所有患者随机分为试验组和对照组两组,其中试验组患者 28 例,对照组患者 31 例。

1.2 纳入标准

所有患者均确诊为下颌第三磨牙阻生,并且在实施拔牙之前无抗生素应用史和急性炎症史;所有患者均无拔牙禁忌症;入选患者均知情同意并自愿参与本次研究。

1.3 排除标准

患者存在系统性疾病史或存在药物过敏史;存在口腔溃疡或其他口腔疾病;因各种原因无法配合本次试验的进行。

1.4 工具器械

一次性口腔检查器械盘;刀柄刀片;持针器;西诺牌牙科高速气涡轮切割手机;牙龈剥离器;牙挺;榔头;固美拔阻生齿专用加长裂钻[型号 H33L.315.017(粗裂钻)和型号 H33L.317.019(细裂钻)各一支];缝针缝线。

1.5 研究方法

所有患者术前均拍摄全景片以评价患者的牙齿阻力来源、与下牙槽神经管的距离和牙根情况以及阻生程度。两组患者的拔牙手术均由同一医师完成,使用 5 mL 浓度为 2%的盐酸利多卡因注射液进行下牙槽神经阻滞麻醉,试验组患者采用牙科高速气涡轮切割手机辅助阻生牙专用加长裂钻进行拔牙,而对照组患者则采取传统的劈骨分牙法,视患者具体情况决定切开牙龈黏膜瓣范围并翻瓣,拔牙完成后所有患者均使用消炎药 3 天。

1.6 评价指标

观察两组患者术中的断根情况和手术时间,通过两组患者的术后复诊对患者的下唇麻木、断根等发生率以及张口受限、疼痛、肿胀等情况进行评价。其中患者主管疼痛程度采用模拟评定量表 VAS 评分,10 分表示痛感最强,0 分则表示无痛感,0～1 分表示无明显不适,2～4 分表示术区有轻微痛感,5～7 分表示术区痛感明显,8～10 分表示严重不适和痛感剧烈。根据患者术后 2 天的肿胀程度和张口受限程度又分为无肿胀症状、术区肿胀、面部轻微肿胀、面部明显肿胀和无受限、轻度受限、中度受限以及重度受限等[4]。

1.7 统计学处理

对我院采集的 59 例需要拔除下颌阻生第三磨牙患者临床资料用 SPSS19.0 软件进行统计分析,试验所得数据均用 $\bar{x}\pm s$ 形式表示,组间比较采用 t 检验,计数资料之间对比采用 X^2 检验,以是否 $P<0.05$ 来比较差异是否具有统计学意义。

2 结果

2.1 比较两组患者术中情况和术后并发症情况

根据我院对两组患者的临床资料进行统计分析,结果显示试验组患者的手术时间为(25.68± 6.83)min,明显低于对照组患者[(35.23± 14.23)min,t=3.962,P=0.000]。试验组患者中仅有 1 例术后出现断根情况,无其他并发症出现;而对照组患者术后则有 3 例断根情况和 1 例下唇麻木患者(后逐渐缓解)、1 例下颌关节疼痛以及 1 例舌侧骨板骨折患者。

2.2 比较两组患者术后 1d 的面部肿胀程度

根据我院对两组患者术后 1d 的面部肿胀情况进行统计分析,结果显示试验组患者术后 1d 面部肿胀程度明显比对照组患者轻($P<0.05$)(表 1)。

表 1 比较两组患者术后 1d 的面部肿胀程度(n)

Table 1 Comparison of facial swelling after operation between two groups(n)

Groups	Facial swelling				Hc,P
	No symptoms	Swelling of the operation area	Slight swelling of the face	Obvious swelling of the face	
Control group(n=31)	1	11	12	7	2.201
Experimental group (n=28)	5	10	8	5	0.041

2.3 比较两组患者术后 1d 的疼痛程度

根据我院对两组患者术后 1d 的疼痛情况进行统计分析,结果显示试验组患者的疼痛情况明显优于对照组患者($P<0.05$)(表 2)。

2.4 比较两组患者术后 1d 的张口受限程度

根据我院对两组患者术后 1d 张口受限情况进行统计分析,结果显示试验组患者的张口受限程度明显比对照组患者轻($P<0.05$)(表 3)。

3 讨论

临床上下颌第三磨牙(mandibular third molar)的其牙根通常融牙合成锥形,也有分叉成多根者,牙冠似球形且各轴面光

表 2 比较两组患者术后 1d 的疼痛程度(n)

Table 2 Comparison of postoperative pain between two groups(n)

Groups	Postoperative pain score				Hc,P
	0～1 score	2～4 score	5～7 score	8～10 score	
Control group(n=31)	2	12	13	4	2.171
Experimental group (n=28)	5	11	10	2	0.033

表 3 比较两组患者术后 1d 的张口受限程度(n)

Table 3 Comparison of the postoperative mouth opening restriction of patients between two groups(n)

Groups	Limitation of mouth opening				Hc,P
	No limitation	Slight limitation	Moderate restriction	Severely limited	
Control group(n=31)	1	10	13	7	4.212
Experimental group (n=28)	4	15	7	2	0.000

滑,其形态、大小和位置变异最多[5]。第三磨牙也是人类口腔中出现最晚的一颗牙,随着人类的繁衍进化,颌骨变小,口腔内没有了足够位置从而变成智齿错位萌出,即为临床所言的阻生牙[6,7]。阻生牙对人体有害无益,通常会导致牙冠周围的软组织产生炎症,因此需要对该牙进行及时的拔除[8]。虽然临床上第三磨牙发炎所带来的危害不大,但是如果不对其进行治疗会出现严重的后果[9]:轻则出现张口受限、饮食困难和发烧的症状,重则出现颌面部间隙感染甚至引起脓毒血症或败血病等全身并发症[10,11]。由于阻生牙的位置不正,被邻牙所阻挡甚或被骨组织包埋,因此临床拔除阻生牙较为困难,同时还可能出现干槽症、邻牙损伤、下唇麻木、断根、出血等并发症[12,13]。目前对下颌第三磨牙的拔除方法主要有使用牙科高速气涡轮切割手机辅助阻生牙专用加长裂钻进行拔牙以及传统的劈骨分牙法两种[14]。本研究中对试验组患者采用牙科高速气涡轮切割手机辅助阻生牙专用加长裂钻进行拔牙,而对照组患者则采取传统的劈骨分牙法,通过两组患者的术后复诊对患者的下唇麻木、断根等发生率以及张口受限、疼痛、肿胀等情况进行评价。根据我院对两组患者的术中情况及术后并发症情况进行统计分析,结果显示试验组患者的手术时间为(25.68± 6.83)min,明显低于对照组患者[(35.23± 14.23)min,t=3.962,P=0.000]。对此,我院认为较长的手术时间会给患者带来较多的痛苦,因此采用牙科高速气涡轮切割手机对患者下颌第三磨牙进行拔除能够较快地完成手术,从而降低患者手术中的痛苦[15,16]。试验组患者中仅有 1 例术后出现断根情况,无其他并发症出现;而对照组患者术后则有 3 例断根情况和 1 例下唇麻木患者（后逐渐缓解）、1 例下颌关节疼痛以及 1 例舌侧骨板骨折患者。由此提示了采用牙科高速气涡轮切割手机对患者进行下颌第三磨牙的拔除手术能够较好地减少术后并发症的发生,安全性高[17,18]。根据我院对两组患者术后 1d 的临床资料进行统计分析，结果显示试验组患者术后 1d 面部肿胀程度明显比对照组患者轻(P＜0.05);试验组患者的疼痛情况明显优于对照组患者(P＜0.05);试验组患者的张口受限程度明显比对照组患者轻(P＜0.05)。传统的劈骨分牙法需要对患者阻生牙进行锤击,其中产生的震动感大且容易造成严重的术后并发症,更有甚者还会对患者造成心理阴影从而对牙科产生抗拒心理[19,20]。而采用牙科高速气涡轮切割手机配合阻生牙专用加长裂钻拔牙能够有效减少手术时间和术后并发症的发生，并且对促进患者的术后恢复也存在着一定的优势。

综上所述,牙科高速气涡轮切割手机配合阻生牙专用加长裂钻拔牙对口腔外科门诊需要拔除下颌阻生第三磨牙患者具有较好的临床治疗效果,值得在临床上加以广泛推广和运用。

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