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Changes of plasma ET/NO ratio and their relationship with pancreatic blood flow during acute pancreatitis in rats

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Abstract Objective: To study the changes of plasma ET/NO ratio and their relationship with pancreatic blood flow during acute pancreatitis. Methods: The rat model of acute hemorrhagic necrotizing pancreatitis (AHNP) was established by injecting 5% sodium taurocholate into the bile-pancreatic duct. The changes of plasma endothelin (ET) nitric oxide (NO) were dynamically determined and their relationship to the changes of pancreatic blood flow (PBF) and pancreatic pathology was also observed. Results: In the early stage of AHNP, pancreatic ischemia occurred and plasma level of ET and NO was significantly increased. Consequently ET/NO ratio was progressively increased. Conclusion: The increase of ET and NO level and ET/NO ratio in the plasma might play a part in the pathological changes of AHNP in rats.

Key words pancreatitis/acute; endothelin; nitric oxide; rat

改良根管疗法治疗多根管后牙尖周炎

Treatment of apical periodonitis of multirooted molar by improved root-canel method

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治疗尖周炎最有效的方法是根管充填。而后牙根管数量多,弯曲小且分叉亦多,操作不方便,给根管扩大和充填带来困难。因此,笔者自1996年来,用替硝唑、头孢氨苄霉素糊剂行新根管疗法治疗多根管后牙尖周炎106例129牙,现报告如下。

1 材料和方法

1.1 一般资料

男51例,女36例,年龄14~76岁,其中45~65岁者占43%。98牙均为恒磨牙,上下颌第一磨牙32牙和25牙,第二磨牙14牙和19牙,第三磨牙3牙和5牙。106例129牙1年后复诊87例98牙,复诊率为75.97%。

1.2 病因分类

龋病所致者54牙,牙冠隐裂15牙,牙尖斜折7牙,牙周牙髓综合征者19牙,残髓炎3牙。

1.3 药物配制

粉:替硝唑6份、头孢氨苄霉素4份;液:丁香油适量。将药粉按上述比例混匀,使用时加少许丁香油液调成糊状即可。

1.4 操作方法

常规开髓、清理和稍扩大根管,有牙龈窦道者须见消毒液从窦道口流出,吹干后,髓腔内封FC棉球,牙胶暂封。1周后,拆去封料,用光滑针蘸少许替硝唑头孢氨苄霉素向根管口内反复导入,再用细根充器尽量将糊剂压入根管内,至病人根尖部有轻微触压感即可,根管口处覆盖此糊剂1.5~2 mm,锌基银汞材料永久充填。术前及复诊时常规口内检查和X线片检查。

1.5 疗效判断标准

成功:无自觉症状,咀嚼功能完好,无叩痛及瘘管,X线示原有根尖病变消失或明显缩小。失败:反复出现肿痛或瘘管形成、牙折裂,X线片示根尖病变不消退或扩大。

2 结果

87例98牙1年复查结果为:成功91牙,占92.86%;失败7牙,其中2牙出现牙龈窦道;4牙牙冠折裂;1牙深牙周袋,松动II°,X线示尖周及根分叉处有稀疏区。失败率7.14%。

典型病例:刘某,女,62岁,退休工人,因右上后牙反复肿痛半年余于1996年1月4日来我科门诊就诊,查$\frac{6}{}$近中邻面深龋,叩(++),探(-),松动I°,牙龈瘘管,X线示根分叉稀疏区,根尖阴影3 mm,按前述程序治疗。1997年1月8日复诊患者无不适,咀嚼功能完好,叩(-),瘘管消失无松动,X线示根炎阴影消失。

3 讨论

3.1 新根管疗法原理

治愈尖周病的主要条件是清除和控制根管内感染。在根管

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Effects of hypobaric hypoxia on calcium uptake of sarcoplamic reticulum in rats

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Abstract Objective: To observe the adaptive changes in calcium uptake of diaphragmatic sarcoplasmic reticulum in rat in response to moderate hypobaric hypoxia. Methods: After the model of hypobaric hypoxia was established in rats, calcium uptake by diaphragmatic sarcoplasmic reticulum was determined with dual-excitation fluorometer using Fura-2 free acid as the tracer. Results: The function of calcium uptake of diaphragmatic sarcoplasmic reticulum was significantly increased after chronic hypobaric hypoxia. Conclusion: Chronic moderate hypobaric hypoxia enhances the excitation-contraction coupling in the diaphragm in rats.

Key words altitude; hypoxia; diaphragm; sarcoplasmic reticulum; calcium; rat

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消毒后,只要在根管中置入有持续消毒杀(抑)菌作用的药物,根尖病变仍可愈合[1]。因此,我们在尽可能的消除了所有根管内的感染坏死物或用 FC液固定少量残余根髓,覆盖根管口和进入根管内的药物会沿着根管壁及牙本质小管通过扩散和毛吸作用至尖周区,起到消除病变的作用。替硝唑对各种厌氧菌有特效,且性能稳定,血药浓度高、药效持久、毒副作用小且无其它配伍禁忌[2]。头孢氨苄霉素是广谱抗菌素,药效强而久。鱼肝油能安抚止痛,促进病灶钙化,利于创面愈合。与报道[3]相比,本组有较高的成功率(92.86%),表明本法及所用药物符合根管治疗原理。

3.2 对本疗法的评价

优点: 操作简便,不扩大根管,在彻底清理和加强根管系统化学消毒后,不须严密充填根管,便可达到治愈的目的;疗效好,疗程短,一般治疗 2次即可永久充填,减少了病人复诊次数;适应症宽,无年龄及牙位的选择,药物配方简便,易于获取;失败后可重复本法治疗或改做常规根管充填。

失败原因分析: 4例牙折,多因死髓牙脆性增强,牙体缺损多或制洞过大所致; 2例牙龈窦道与清理、消毒根管不彻底有关; 1例深牙周袋多为咬合创伤所致。

操作注意: 尽量彻底清理和消毒根管,术毕适当降 ,酌情壳冠保护,以防止牙折。

关键词 新根管疗法;替硝唑头孢氨苄霉素糊剂;尖周炎

中图法分类号 R781.341

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