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·临床研究·

41例慢性复发性腮腺炎临床回顾性分析

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【摘要】 目的 探讨慢性复发性腮腺炎（chronic recurrent parotitis，CRP）的临床表现与治疗方案，为该病的临床诊治提供参考依据。**方法** 获得医院医学伦理委员会批准，对资料完整的41例CRP患者的临床特点、影像学特征和诊断治疗进行回顾分析总结。**结果** 41例CRP患者中男性14例，女性27例，男女比例约为1∶2（14/27）。首次发病年龄为3～23岁，中位年龄为6岁，其中首次发病年龄在18岁以下的患者有38例（92.7%，38/41）；首次来本院就诊时的年龄4～72岁，平均年龄为（41.0±17.3）岁；病程0.5～66年，平均病程为（35.0±16.1）年；双侧腮腺发病者25例（61.0%，25/41）。临床表现为单侧或双侧腮腺反复肿胀，伴不适，可伴轻度水肿或皮肤潮红，导管口有脓液或胶冻样分泌物。腮腺造影的典型表现为：腮腺主导管及分支导管无特异性扩张或缩窄，末梢导管呈特征性的“点状、球状或腔状”扩张、排空延迟。其中主导管口增大异常者34例（82.9%，34/41）；副腺体位置偏前异常者37例（90.2%，37/41）。采用“抗生素灌注+阻塞物抽吸清除（或阻塞物溶解后抽吸清除）+餐后顺腺体导管方向自后向前按摩/多疗程巩固”的治疗方案，效果良好，该组病例平均随访（71.1±21.9）个月，随访期内无复发。**结论** CRP好发于女性幼儿，且多为双侧发病；主导管口异常增大、副腺体位置偏前等先天性解剖结构缺陷是重要的易感因素；以抗生素灌注、阻塞物抽排与溶解、餐后顺腮腺导管方向自后向前按摩为核心的多疗程综合疗法疗效显著，值得临床推广应用。

【关键词】 慢性复发性腮腺炎；慢性化脓性腮腺炎；慢性阻塞性腮腺炎；舍格伦综合征；腮腺导管；副腮腺；唾液腺造影；碘化油；抗生素灌洗；盐酸氨溴索注射液；溶栓治疗
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Clinical retrospective analysis of 41 cases of chronic recurrent parotitis

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【Abstract】 Objective To explore the clinical manifestations and treatment plans of chronic recurrent parotitis (CRP), and to provide a reference for the clinical diagnosis and treatment of CRP. **Methods** Approval was obtained from the hospital's Medical Ethics Committee, and a retrospective analysis and summary of the clinical features, imaging characteristics, diagnosis, and treatment of 41 CRP patients with complete data were performed. **Results** Among the 41 patients with CRP, 14 were male and 27 were female, with a male-to-female ratio of approximately 1:2 (14/27). The age at first-time onset ranged from 3 to 23 years, with a median age of 6 years, and there were 38 patients (92.7%, 38/41) with the first onset age of under 18 years old. The age of the first visit to our hospital ranged from 4 to 72 years

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old, with an average age of (41.0 ± 17.3) years; the disease duration was 0.5 to 66 years, with an average of 35.0 ± 16.1 years. Twenty-five cases had bilateral parotid gland involvement (61.0%, 25/41). The clinical manifestations of CRP are repeated swelling of one or both parotid glands, along with discomfort, and this may be accompanied by mild edema or skin flushing and pus or jelly-like secretions at the duct openings. The typical manifestations of parotid angiography are: the dominant duct and branch ducts of the parotid gland do not have specific dilation or narrowing, and the peripheral ducts show characteristic "punctate, spherical, or cavitary" dilation and delayed emptying. Of the cases, 34 had abnormal enlargement of the main duct orifice (82.9%, 34/41), and 37 presented with abnormal anterior displacement of the accessory glands (90.2%, 37/41). The treatment plan of "antibiotic perfusion + aspiration and removal of obstruction (or aspiration after obstruction dissolution)+ postprandia massage along the direction of the parotid duct (from posterior to anterior) with multiple courses for consolidation" achieved favorable outcomes. The mean follow-up period of this group was(71.1+21.9)months, and no recurrence was observed during the follow-up period. **Conclusion** CRP is more prevalent in young females and frequently presents with bilateral involvement. Congenital anatomical defects, such as abnormal enlargement of the main duct orifice and abnormal anterior displacement of the accessory glands, are important predisposing factors. The multi-course comprehensive therapy centered on antibiotic infusion, removal and dissolution of obstructions, and post-prandial massage along the direction of the parotid duct has significant therapeutic effects and deserves clinical application.

【Key words】 chronic recurrent parotitis; chronic suppurative parotitis; chronic obstructive parotitis; Sjögren's syndrome; parotid duct; accessory parotid gland; sialography; lipiodol; antibiotic irrigation; ambroxol hydrochloride injection; thrombolytic therapy

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慢性复发性腮腺炎(chronic recurrent parotitis, CRP)是腮腺的慢性炎症性疾病,临床表现为反复肿胀,其病因尚不明确[1]。诊断主要根据临床表现及腮腺造影,其影像学表现与舍格伦综合征(Sjögren syndrome, SS)继发感染的影像表现极为相似,均可见"末梢导管弥漫性点状、球状或腔状扩张"。经验不足的影像科医师及临床医师容易混淆。目前CRP尚缺乏标准的治疗方案[2-3],现有疗法效果多不理想,常仅能控制慢性炎症发病次数,而难以从根本上彻底治愈。笔者在临床实践中,采用"抗生素灌注+阻塞物抽吸清除(或阻塞物溶解后抽吸清除)+餐后顺腺体导管方向自后向前按摩/多疗程巩固"的治疗方案,对41例慢性复发性腮腺炎的治疗,取得良好的临床效果,现报道如下,以期为该病的临床治疗提供参考。

1　资料与方法

1.1　研究对象

选取2016年6月至2025年3月在南方医科大学口腔医院就诊的CRP患者共48例。纳入标准:① 诊断为CRP;②临床资料完整;③治疗采用"抗生素灌注+阻塞物抽吸清除(或阻塞物溶解后抽吸清除)+餐后顺腺体导管方向自后向前按摩"综合治疗2个疗程以上;④ 治疗结束随访6个月以上。排除标准:①临床资料不完整者;② 未行腮腺造影检查或无完整影像资料者(如碘过敏);③ 确诊为其他唾液腺炎症性疾病者;④ 治疗期间依从性差未完成2个疗程综合治疗或治疗后失访者。最终,共纳入41例具备完整影像及临床治疗随访资料的CRP患者作为研究对象。本研究已获医院医学伦理委员会批准(审批号:NNKQ-EC-[2025]39)。

1.2　诊断标准

CRP确诊主要根据临床表现和影像特征。临床表现为单侧或双侧腮腺反复肿胀,伴不适,可伴轻度水肿或皮肤潮红,导管口有脓液或胶冻样分泌物。腮腺造影的典型表现为:腮腺主导管及分支导管无特异性扩张或缩窄,末梢导管呈特征性的"点状、球状或腔状"扩张、排空延迟。

1.3　腮腺造影检查

局部碘伏消毒腮腺导管口,将专用圆钝针头插入腮腺导管内,并确保进入腺门区。缓慢注射Guerbet碘化油注射液0.5~3.0 mL(成人常用量约为

2 mL),同时密切注意患者主、副腺体区肿胀均匀性及胀痛感,并适时微调针管方向,避免造影剂过度充盈某部分腺体或导致某分支导管压力过大破溃。待主腺体均匀充盈后以棉球压住主导管口,继而边退针边缓慢推注少量造影剂,以维持主导管管腔内压力,确保副腺体得以完全充盈,在SIRONA全景机(型号:ORTHOPHOS XG 3D ready Ceph)按标准体位和条件进行拍摄腮腺造影X线片。主导管口大小等体征由造影医师检查完后即刻记录于检查单上。

1.4　CRP局部用药治疗方案

1.4.1　治疗频次　① 每个疗程5~7 d;② 频率为1次/d,每次治疗须确保主、副腺体充分充盈;③ 每次有效药物浓度维持时间应≥45 min;④ 第1与第2个疗程间隔时间2~3周,第3及第3个疗程以后每个疗程间隔时间4周。

1.4.2　操作流程　① 抗生素与溶解药物灌注方式与造影剂注入方式一致;② 溶解药物(7.5 mg/mL盐酸氨溴索注射液5 mL)灌注后需以棉球压迫主导管口1 h,以利药液充分溶解阻塞物。若存在明确阻塞物,应使用长针头尽量抽吸干净,确保主导管持续通畅。

1.4.3　用药方案　根据患者的病程及局部症状,以及全身情况,采用单一药物(0.5%甲硝唑注射液3 mL)反复灌洗或采用联合用药(0.5%甲硝唑注射液3 mL+4%庆大霉素注射液2 mL)反复灌洗;甲硝唑、庆大霉素过敏或耐药者可考虑奥硝唑、替硝唑及罗氏芬等替代,儿童用药根据年龄及体重酌减。慢性复发性腮腺炎急性发作者,辅以口服或静脉使用抗生素。

1.4.4　多个疗程的指征　① 根据病情的严重程度、患者的耐受能力、进针的顺畅度、充盈度、阻塞物多少来综合判断;② 轻症患者一般不少于2个疗程;③ 达到临床治愈指标,疗程结束。

1.5　CRP治愈指标

符合以下全部指标者即可判定为临床治愈。①临床症状消失:腮腺区肿胀与疼痛完全消失,进食等刺激下无发作;②临床检查正常:腮腺质地柔软、无压痛,导管口无红肿,按摩腮腺可见清亮唾液流出;③影像学表现改善:B超、造影等检查显示腺体梗阻解除;④生活质量提高:患者不再因腮腺问题影响进食、心情和生活,且无需因该病就诊;⑤持续随访6个月以上无复发。

1.6　统计学分析

数据采用SPSS 25.0软件进行统计学分析。计数资料以频数(百分比)表示,组间比较采用卡方检验,检验水准为$\alpha=0.05$。

2　结　果

2.1　CRP患者的一般资料

本研究共纳入41例CRP患者,其性别和年龄段分布如表1所示。其中男性14例,女性27例,男女比例约为1:2,性别分布差异具有统计学意义($P<0.001$)。CRP患者首次发病年龄中位数为6岁,其中18岁以下青少年38例(92.7%,38/41),不同年龄段发病分布差异具有统计学意义($P<0.001$)。本组患者第一次来本院的就诊年龄4~72岁,平均年龄为(41.0±17.3)岁;病程为0.5~66年,平均病程为(35.0±16.1)年。

表1　41例慢性复发性腮腺炎患者一般资料的分布

Table 1　Distribution of general data among 41 patients with chronic recurrent parotitis

General information	The number of patients	χ^2	P
Gender			
Male	14(34.1)	36.339	<0.001
Female	27(65.9)		
The age of patients′ first onset/years			
<18	38(92.7)		
18-59	3(7.3)	38.726	<0.001
≥60	0(0)		

2.2　临床特点与影像学特征

41例CRP患者均有符合诊断标准的临床与影像学表现,研究结果表明该组CRP患者具有明显的临床特点与影像学特征(表2)。其中双侧腮腺发病患者25例(61.0%),单侧腮腺发病患者16例(39.0%),发病部位差异具有统计学意义($P<0.001$)。腮腺造影发现腮腺主导管口增大异常患者34例(82.9%),主导管口正常患者7例(17.1%),两组间差异具有统计学意义($P<0.001$);副腮腺腺体位置偏前异常者37例(90.2%),副腮腺腺体位置基本正常者4例(9.8%),副腮腺腺体位置分布差异具有统计学意义($P<0.001$)。此外,腮腺主导管口大小正常且腮腺副腺体位置正常或无副腺体者仅1例(2.4%,1/41)。

2.3　治疗方法及预后

本研究41例患者均实施系统规范化治疗,通

表2　41例慢性复发性腮腺炎患者的临床特点与影像学特征

Table 2　Clinical and imaging characteristics of 41 patients with chronic recurrent parotitis

General information	The number of patients	χ^2	P
Site of onset			
Bilateral	25(61.0)	48.607	<0.001
Unilateral	16(39.0)		
Principal duct opening size①			
Abnormally large	34(82.9)	28.795	<0.001
Normal	7(17.1)		
Location of accessory glands②			
Position anteriorly	37(90.2)	34.265	<0.001
Normal	4(9.8)		

① Criteria for evaluating the principal duct opening size of the parotid gland: (1) When an 8-gauge (0.8 mm diameter) blunt needle can be inserted into the principal duct opening of the parotid gland with a slight sense of obstruction (but it can be easily inserted, it indicates that the size of the principal duct opening is normal; (2) If a 9-gauge (0.9 mm diameter) or larger blunt needle can be easily inserted, it indicates that the size of the principal duct opening of the parotid gland is abnormally enlarged. ② Criteria for evaluating the position of the parotid accessory gland: (1) If the first parotid accessory gland is located within 3 mm in front of the anterior margin of the main parotid gland, it is considered to be in a normal position; (2) If the first parotid accessory gland is located more than 3 mm in front of the anterior margin of the main parotid gland, it indicates that the position of the accessory gland is abnormally anterior

过“抗生素灌注+阻塞物抽吸清除(或阻塞物溶解后抽吸清除)+餐后顺腺体导管方向自后向前按摩/多疗程巩固”综合治疗策略,本组病例随访6个月至9年期间均未见复发,随访期内CRP的治愈率100%。

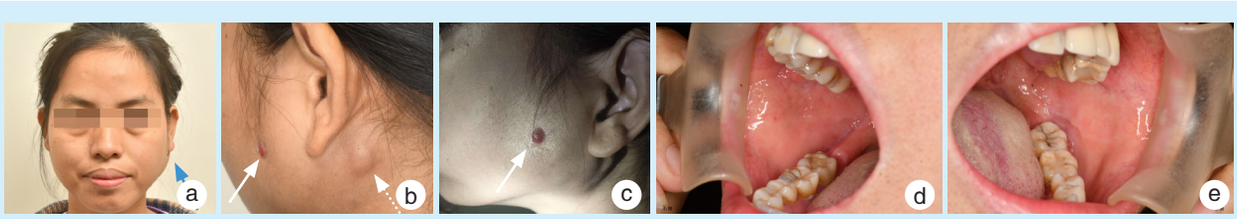
3　典型病例

3.1　一般资料

患者,女性,35岁。主诉“双侧腮腺反复肿痛3年余伴轻度口干、眼干5年”。期间曾于外院多次接受抗炎治疗,效果欠佳,左侧腮腺发作频率增加、症状持续性加重。半年前外院曾根据患者相关生化指标及MRI/CT/超声/核素显像等影像特征诊断为“舍格伦综合征”,并按舍格伦综合征进行治疗,未见好转,左侧腮腺腺体持续肿大、变硬。随后在外院进行唇腺及腮腺穿刺活检,报告为慢性炎症。现因双侧腮腺呈浸润块样改变,且穿刺口迁延不愈,转至南方医科大学口腔医院口腔颌面外科就诊。既往5岁时曾有双侧腮腺肿胀史,否认其他疾病史及药物过敏史。

3.2　临床检查

3.2.1　临床专科检查　颌面不对称,双侧腮腺肿大,尤以左侧肿大明显(图1a),左侧腮腺区皮肤见瘘管(图1b、1c),餐后有清亮液体流出(图1c);左腮腺后缘耳垂平面见一大小约12 mm×16 mm肿物突起(图1b),质软,呈囊性,界清,皮肤颜色正常。双侧腮腺区皮温基本正常,左侧腮腺区质地僵硬呈浸润块较右侧明显,轻度压痛;张口度基本正常,双侧腮腺导管口充血不明显,可见少量分泌物,分泌物呈稍浑浊胶冻样物;左腮腺主导管内可抽出少量条索样物;口内双侧颊黏膜湿润(图1d、1e);眼部结膜正常,施墨试验显示眼液分泌基本正常。



a: left parotid gland enlargement (indicated by the blue solid arrow); b: a long-term unhealed fistula formed after parotid gland puncture(indicated by the white solid arrow) and the largest “pseudocyst” protruding from the posterior margin of the parotid gland(indicated by the white dashed arrow); c: a large amount of liquid flowing out from the fistula after liquid was injected into the main duct (indicated by the white solid arrow); d & e no significant dryness in the right and left oral mucosa

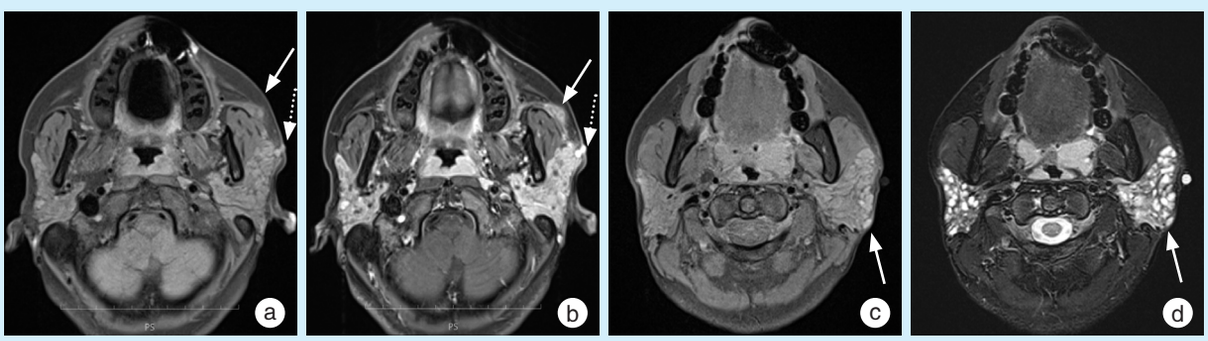
Figure 1　Facial and oral photographs of the left parotid region pretreatment in a patient with chronic recurrent parotitis

图1　慢性复发性腮性炎患者左侧腮腺治疗前面部及口腔检查照片

3.2.2　影像学检查　外院核磁共振影像显示:右侧腮腺轻度增大,左侧腮腺明显增大,双侧腮腺形态不规则;双侧腮腺内可见多个大小不等囊腔影;左侧副腮腺的第一分支位于咬肌前缘外侧(图2)。

本院腮腺造影显示双侧主导管稍增粗，双侧分支导管稍稀疏；右侧腮腺副腺体明显偏前，左侧腮腺副腺体显著偏前；主、副腺体末梢导管呈球状、腔状扩张均匀分布于整个腺体，以腔状扩张为主，部分区域显著扩张融合——形成“假性囊肿”（图3a、3b）。

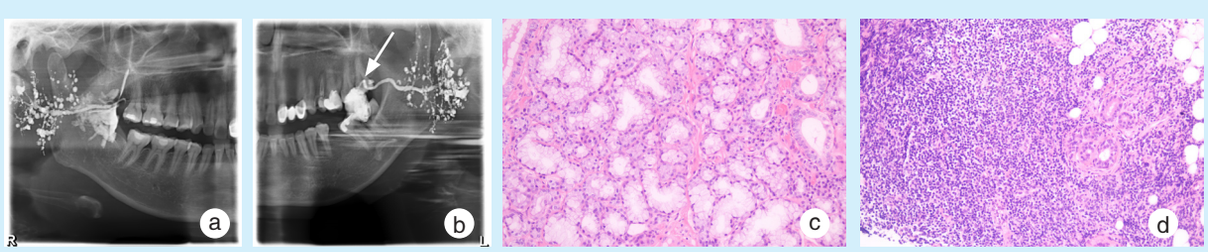
3.2.3　病理检查　病理科会诊外院唇腺病理切片报告未见异常（图3c）；腮腺病理切片会诊报告（图3d）：存在慢性炎症改变。



a: T1WI with fat suppression; b: T1WI with enhancement; c: T1WI with fat suppression; d: T2WI with fat suppression. a – d MRI(magnetic resonance imaging) shows: mild enlargement of the right parotid gland, obvious enlargement of the left parotid gland, and irregular shapes of both glands. Multiple cystic spaces of varying sizes are seen within both glands. a & b: The first branch of the accessory gland on the left side is located lateral to the anterior border of the masseter muscle (indicated by the white solid arrow); The puncture fistula of the left parotid gland is located at the intermediate accessory gland (indicated by the white dashed arrow). c & d: A relatively large “pseudocyst” is seen lateral to the posterior margin of the left parotid gland, with an outward protrusion (indicated by the white solid arrow)

Figure 2　MRI sequences showing the accessory parotid gland and fistulous tract and pseudocyst in a patient with chronic recurrent parotitis

图2　慢性复发性腮性炎患者MRI各序列副腺体、瘘管、假性囊腔显示图像



a & b: pre-treatment parotid sialography shows bilateral main ducts slightly enlarged and bilateral branch ducts slightly sparse; the right accessory gland is significantly anterior, and the left accessory gland is markedly anterior (solid white arrows); the peripheral ducts of both the main and accessory glands show uniformly distributed spherical and cavity-like dilatations throughout the glands, predominantly cavity-like, with significant dilatation and fusion in some areas - forming “pseudocysts” (more obvious on the left). c: pathological section consultation report labial glands are essentially normal (HE, ×200); d: pathological section consultation reports chronic inflammatory changes in the parotid gland (HE, ×200)

Figure 3　Panoramic sialography views of bilateral parotid glands and pathological sections of lip and parotid gland biopsy in patients with chronic recurrent parotitis before treatment

图3　慢性复发性腮性炎患者双侧腮腺治疗前腮腺造影全景片和患者唇腺、腮腺活检病理切片

3.2.4　实验室检查　血常规、血生化检查未见异常。

3.3　*临床诊断*

①双侧慢性复发性腮腺炎；②左侧腮腺涎瘘。

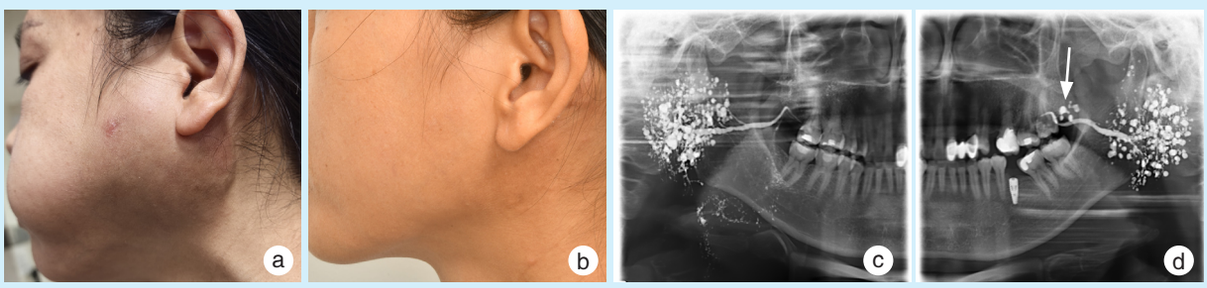
3.4　*治疗方法*

采用“抗生素灌注+阻塞物抽吸清除（或阻塞物溶解后抽吸清除）+餐后顺腺体导管方向自后向前按摩/多疗程治疗”，局部用抗炎药（0.5%甲硝唑注射液3 mL+4%庆大霉素注射液2 mL）反复灌洗。

3.5　*治疗结果*

经过3个疗程的抗炎治疗，左侧腮腺涎瘘瘘口

完全闭合(图4a)。经过总共6个疗程的治疗,患者完全恢复正常。目前,患者腺体质地转为柔软,恢复良好,随访连续10个月无复发(图4b~4d)。



a: during the third course of treatment, the skin fistula had completely closed, the pseudocyst had disappeared, and the fistula remained intact after infusion of 10 mL of liquid; b: after the sixth course of treatment, swelling had completely subsided, and the fistula and "pseudocyst" had completely disappeared; c & d: parotid sialography taken six months after the sixth course of treatment shows that compared with pre-treatment, the main ducts and branch ducts become clearer, and the punctate, spherical, and cavity-like dilatations of the peripheral ducts of main and accessory glands have significantly increased in number and are more evenly distributed, with the original "pseudocysts" significantly reduced in size

Figure4　Facial photos of the left parotid gland during and after treatment in patients with chronic recurrent parotitis, as well as panoramic sialography views of bilateral parotid glands post treatment

图4　慢性复发性腮性炎患者左侧腮腺治疗中及治疗后的面部照片与治疗后腮腺造影片

4　讨　论

4.1　CRP发病原因

CRP的病因机制尚有争论,Hidalgo-Santos等[4]认为CRP与免疫缺陷有关;Reid等[5]则提出先天性唾液腺发育异常是潜在的发病因素,且部分病例具有遗传性特征。笔者认为,相比于腺体内部发育异常/缺陷,先天性主导管口发育过大及副腺体位置发育偏前是本病的最主要的解剖易感因素,这与Zhu等[6]的研究相符。首先,过大的主导管口易造成食物残渣或细菌过多、过深地逆行进入主导管内,从而诱发逆行性感染,部分患者甚至鼓颊时空气会进入主导管内。Brook[7]对47例急性化脓性唾液腺炎患者的脓液样本进行分析,结果显示其主要致病菌为厌氧菌,包括革兰氏阴性杆菌(如色素普氏菌属、卟啉单胞菌属及梭杆菌属)以及消化链球菌属。因此,本组病例治疗上首选甲硝唑等抗厌氧菌药物。本研究首次提出的主导管口大小判断标准操作简便、易于评定,具备良好的推广应用价值。其次,副腺体位置发育偏前,相当于主导管变短,易造成副腺体逆行性感染。该因素既往未被充分关注,原因在于常规的腮腺正位/侧位片难以清晰显示副腺体,且造影时也未刻意使其充分充盈。相比之下,全景片能够完整、清晰地展示副腺体及导管系统,具有价格低廉、操作简便、成像迅速等优势,值得在临床中广泛推广。最后,并非由腺体内存在先天性发育缺陷/异常导致CRP的另一重要证据在于:CRP易形成点状、球状及腔状扩张的特征,多见于腺体尚未发育成熟的幼儿期发病阶段。幼儿期CRP彻底治愈后,其点状扩张可逐渐减小甚至完全消失。若为腺体内发育异常或缺陷所致,点状扩张不应完全消失,最多仅能缩小。点状扩张的消失机制在于,炎症消退后,原先增生狭窄的末梢导管周围纤维组织发生改建与吸收,狭窄解除,腔内压力恢复正常,从而使点状扩张自然回退。值得关注的是,CRP炎症彻底治愈后,部分病例中点状、球状及腔状扩张反而可能增多或增大。笔者认为,该现象源于炎症消退后腺体内纤维组织改建吸收,腺体弹性得以恢复,原闭塞的导管重新开放,腺体内蓄积的阻塞物得以排出,从而在影像上呈现扩张结构增多或扩大的表现。

Boogaard等[8]对31例CRP的研究显示,74%的病例存在双侧腮腺受累,与本研究病例61.0%的双侧发病率较为接近。在本研究病例中,25例成人复发性腮腺炎患者中22例确认曾有幼年腮腺肿大史。这表明:成人CRP多数来源于婴幼儿时期未彻底治愈或隐匿迁延的CRP。

4.2　CRP的影像特征

CRP是一种腮腺慢性炎症性疾病,其影像学表现具有以下特征。①造影表现[9]:主导管一般无异

常改变或可轻度扩张不整；分支导管因尚未发育成熟，显示稀少；末梢导管扩张呈点状、球状，少数甚至可呈腔状，副腺体也可受累。本研究病例完全符合此造影表现。②B超表现[10-11]：急性炎症期可见腺体增大，内部回声不均匀，可见点状、窦状低回声区，血流信号增多，脓肿形成时表现为液性暗区；慢性炎症时腺体可增大，回声不均匀，点状或窦状低回声区可能较急性期有所减少，但症状较重者通常仍可见较多此类低回声区。③MRI表现[12-13]：MRI平扫T1WI可见腺体中不均匀的低信号点状、球状或腔状区域，T2WI则为高信号表现；MRI采用特殊的成像程序，不需要注入造影剂即可显示导管系统结构。然而，CT、MRI及超声对点状扩张与未扩张导管的显示能力有限，因此笔者推荐将全景片涎腺造影作为CRP影像诊断的首选方法。

4.3　鉴别诊断

舍格伦综合征的诊断主要基于患者口眼干燥的主观症状、临床检查、血清学检查、组织病理学及影像学检查[14-17]。舍格伦综合征组织病理学特征主要为腺实质萎缩，间质淋巴细胞浸润，肌上皮岛形成。病变从小叶中心开始，腺泡破坏、消失，并被淋巴细胞取代，可形成淋巴滤泡；腺小叶轮廓一般保留，病变区无纤维组织修复反应。

影像学检查是舍格伦综合征诊断的重要依据。唾液腺造影表现：① 唾液腺末梢导管点状、球状、腔状扩张是舍格伦综合征较为典型的造影表现，但此类表现与CRP高度相似，易导致误判。总体而言，典型舍格伦综合征末梢导管扩张更加弥散、细小、均匀；② 向心性萎缩是舍格伦综合征的另一重要造影特征，也是与CRP鉴别的关键影像学依据，表现为主腺体、副腺体以及主导管和分支导管均呈同等程度的明显缩小。CT、MRI、超声和放射性核素检查均缺乏具有鉴别诊断意义的特异性征象。临床误诊常见于未行唾液腺造影检查，仅依据CT、MRI、超声等非特异性影像表现及部分吻合的生化指标即作出诊断，而忽视了病理学等关键指标的不一致，从而导致诊断偏差及不良临床结局。

4.4　CRP的机制与治疗

目前，CRP尚无统一的治疗标准。对于轻度急性发作的CRP，可采取保守治疗；若发作频繁或持续加重，则需主要依靠抗生素与止痛药物控制症状，以防止腺体实质进一步受损。然而，抗生素的具体应用尚存争议，且缺乏统一的治疗标准[18-19]。根据当前常规的抗炎治疗方案，多数患者在疾病复发（急性发作期）后，经全身性抗生素治疗（如静脉输注或口服）1～2周，病情即可得到控制并维持一段稳定期；然而，一旦机体抵抗力下降或摄入某些食物（如中医所称“发物”），症状便再次发作。且部分患者甚至需要长期依赖抗生素控制症状，进而增加了耐药风险。笔者曾接诊1例病程长达35年的CRP患者，其对甲硝唑、庆大霉素、奥硝唑、替硝唑等多种抗生素均已耐药，青霉素疗效亦不显著，最终经罗氏芬治疗方得以控制。

基于上述临床现象，笔者认为CRP的反复发作与其病理机制密切相关。从组织病理学角度，CRP中出现的纤维组织增生区域或淋巴细胞灶性聚集区，实为机体未能彻底清除病原微生物所形成的慢性病灶。整个腺体内存在大量此类病灶，是机体的一种自我保护性反应：纤维组织通过增生包裹未完全清除的急性和亚急性病原体，限制其进一步扩散。然而，这种包裹性结构在限制病原体扩散的同时，也阻碍了外部物质（如消炎药物）进入病灶内部，导致局部药物浓度不足，病灶内的病原微生物难以被彻底清除，这正是全身性用药虽能控制急性发作、却难以实现根治的关键原因——全身用药可杀灭由慢性病灶扩散出来的急性或亚急性病原体，却难以作用于慢性病灶内部潜伏的微生物。当机体免疫力下降时，潜伏病原体再次活跃，导致炎症复发。此外，中医角度常提及的“发物”现象亦可由此机制解释：这类食物多富含小分子营养物质，理论上应有助于增强机体免疫，促进康复；然而在部分慢性病患者中，其可能更易渗入慢性病灶，为其中处于营养匮乏状态的病原微生物提供生长支持，促使病灶活跃，从而导致疾病复发。

在理解上述机制后，CRP的治疗思路便愈加清晰。首先，尽管提高全身用药浓度与延长用药时间理论上可清除慢性病灶，但全身用药的毒副作用限制了该路径的可行性，而局部用药可有效突破此局限：通过导管内直接给药，既能显著提高局部药物浓度，又可延长作用时间。由于药液总量低，且大部分药液可随唾液排出，进入血液循环的剂量极低，全身性副作用因而微乎其微。若能在短期内将急性和慢性病灶中的病原体彻底清除，细菌不复存在，耐药性问题将从根本上得到避免。Nahlieli等[20]提出CRP的潜在诱因包括局部自身

免疫反应、过敏、感染和遗传等因素，但多为推测，且未提出有效的预防性治疗方案。本研究从临床表现、影像特征、慢性炎症的发病机制等方面综合分析，认为感染与解剖结构易感性（如主导管口过大、副腺体位置偏前）为主要诱因，并提出“抗生素灌注+阻塞物抽吸清除（或阻塞物溶解后抽吸清除）+餐后顺腺体导管方向自后向前按摩/多疗程巩固”的综合治疗策略，该方案在本研究的随访期内有效率可达100%。在病灶被彻底清除后，指导患者养成餐后按摩腮腺的习惯，并减少零食摄入，可通过机械挤压排出逆行进入导管的食物残渣与细菌，从而降低再感染风险。

对于症状严重、发作频繁的患者，可考虑采取更积极的治疗手段，如唾液腺内窥镜下的导管冲洗、扩张或药物灌注[21-24]。Geisthoff等[24]在不局部麻醉条件下用生理盐水灌注冲洗，治疗6例3.3~7.7岁青少年CRP，仅2例缓解，4例轻度改善，说明生理盐水灌注冲洗效果不佳，急性期不宜作为主要手段。涎腺内窥镜虽对导管内阻塞物清理有效[25-28]，但对慢性炎症的治疗价值不大。关于CRP相关的免疫紊乱[4,29]，笔者认为其本质是慢性炎症的一个表象，因为有无数的慢性微小病灶存在机体内，可导致人体的免疫系统被过度激活，免疫球蛋白会增高。本综合治疗策略中所涉及的若干方法，有研究者虽曾尝试，但整体疗效并不理想[18-19,24]，其主要原因在于既往对该疾病的系统性成因认识尚不全面。具体包括以下方面：①对先天性解剖易感因素认识不足，如主导管口过大易致食物残渣和细菌侵入，增加逆行感染风险，副腺体位置若偏前，等效于导管功能性缩短，细菌仅需迁移较短距离即可首先感染副腺体，继而进一步向主腺体蔓延；②对纤维组织增生包裹所形成的慢性炎性病灶理解不清，未能认识到其作为感染持续存在的结构基础；③对含有慢性病灶的闭塞或阻塞性腺体的病理特点把握不到位，影响针对性治疗的开展；④局部给药技术不成熟，难以实现病灶内药物的有效浓度与作用时间；⑤对如何系统性预防逆行性再感染，尚未形成全面、可行的策略。

综上所述，充分认识CRP的发病机制，予以有效干预，CRP的临床治愈是可以实现的。本研究结果表明“抗生素灌注+阻塞物抽吸清除（或阻塞物溶解后抽吸清除）+餐后顺腺体导管方向自后向前按摩/多疗程巩固”的治疗方案，疗效显著，值得临床推广应用。

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