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· 文献综述 ·

## 胰头肿块型胰腺炎诊断和外科治疗进展

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### 摘要

随着慢性胰腺炎发病率的逐年升高, 胰头肿块型胰腺炎发病率也逐年升高。在临床工作中, 胰头肿块型胰腺炎与胰腺癌较难鉴别。但是两者的治疗方案决然不同, 且预后差别大。因此胰头肿块型胰腺炎越来越多的受到临床工作者关注。笔者就胰头肿块型胰腺炎的诊断和外科治疗做一综述, 以期望为临床提供一些参考。

### 关键词

胰腺炎, 慢性 / 诊断; 胰腺炎, 慢性 / 治疗; 综述文献  
中图分类号: R657.5

## Progress in diagnosis and surgical treatment for pancreatic head mass due to chronic pancreatitis

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### Abstract

The incidence of the mass-forming chronic pancreatitis of the pancreatic head has increased with the increasing prevalence of chronic pancreatitis over the years. In clinical practice, the differential diagnosis between this type of chronic pancreatitis and pancreatic cancer is often difficult. However, the treatment strategies and outcomes of the two are completely different. Thus, increasing attention has been paid to this condition by clinical staff. The authors, in this article, address the diagnosis and surgical treatment of mass-forming chronic pancreatitis of the pancreatic head, so as to provide some reference in clinical practice.

### Key words

Pancreatitis, Chronic / diag; Pancreatitis, Chronic / therap; Review  
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慢性胰腺炎是由于各种病因导致的胰腺组织

和功能不可逆转的慢性炎症性疾病。在胰腺实质反复纤维化、萎缩等过程中, 部分患者胰腺常出现炎性肿块, 其中又尤以胰头部最多见。这些患者常伴有胆道梗阻、胰管梗阻、疼痛、以及内外分泌功能紊乱。近年来, 胰头肿块型胰腺炎发病率逐年提高, 且难以与胰头癌鉴别。苗毅教授<sup>[1]</sup>认

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为虽然手术方式多种多样,但是应制定个体化治疗方案。因此其诊断及外科治疗越来越多的受到临床工作者的关注。本文将对肿块型胰腺炎的诊断和外科治疗新进展做一综述。

## 1 胰头肿块型胰腺炎诊断

胰头肿块型胰腺炎是节段性慢性胰腺炎中的特殊类型,因炎症反应迁延不愈、胰腺实质破坏、纤维组织增生,形成胰腺肿块<sup>[2]</sup>。近年来随着慢性胰腺炎发病率的逐年升高<sup>[3]</sup>,胰头肿块型胰腺炎发病率也逐年升高。其约占慢性胰腺炎的15%~30%<sup>[4]</sup>。此外,随着时间的延长,约有2%~16.5%的慢性胰腺炎患者将发展为胰腺癌<sup>[5-7]</sup>。在西方国家,慢性胰腺炎主要来自酒精性胰腺炎<sup>[8]</sup>;在国内,慢性胰腺炎主要来自胆源性和酒精性胰腺炎<sup>[9]</sup>。此外还有部分胰头肿块型胰腺炎缘于自身免疫性胰腺炎<sup>[10]</sup>。以下将从如下四个方面进行叙述胰头肿块型胰腺炎的诊断。

### 1.1 临床表现

胰头肿块型胰腺炎的临床表现为腹痛、厌食、恶心、呕吐、体质量减轻和梗阻性黄疸。肿块含有如下特征:包括胰头钙化、高龄、胃出口梗阻、突发腹痛、梗阻性黄疸、严重体质量丢失,常提示恶性肿瘤可能<sup>[11-12]</sup>。

### 1.2 肿瘤标志物

在血清的肿瘤标志物中,CA19-9被认为是目前胰腺癌诊断的最好指标<sup>[13]</sup>,但是在部分胰头肿块型胰腺炎患者中,肿瘤标志物(包括CA19-9、CEA)也有轻度至中度升高(20~300 U/mL)<sup>[11,14-15]</sup>。因此部分研究结论推荐鉴别肿块型胰腺炎与胰腺癌的CA19-9检测值阈值为300 U/mL<sup>[11,14-16]</sup>。此外还有一些新兴蛋白标志物,如TIMP1、ICAM1、AZGP1<sup>[15]</sup>。

### 1.3 影像学检查

通过影像学检查(超声、CT、MRCP、ERCP等)发现胰头肿块以及胰腺组织的异常表现、肝外胆管及胰管有无扩张与梗阻、肝外胆管及胰管有无结石等,临床医师通过此发现鉴别胰头肿块型胰腺炎和胰腺癌。慢性胰腺炎多有广泛的胰腺钙化、胰管扩张、胰管结石,但有些胰腺癌患者则表现为胰腺组织局灶性钙化和胰腺结构紊乱。

约20%的慢性胰腺炎患者和约90%的恶性肿瘤患者均有胆管和胰管的同时扩张<sup>[3]</sup>。慢性胰腺炎可有胰腺萎缩,胰腺癌则少见。虽然国内有小样本报道<sup>[12]</sup>胰腺萎缩、胰腺周围及血管侵犯、胰管扩张、胰管中断、胆管扩张在胰腺癌和肿块型胰腺炎鉴别诊断中有统计学差异,但是目前没有大样本的临床研究证实某一影像表现具有高特异性、高敏感性。

### 1.4 病理学检查

针对临床表现、肿瘤标志物、以及影像学检查仍然无法鉴别诊断的患者,穿刺病理诊断是较好选择。内镜超声能克服传统超声、CT引导下穿刺诸多缺点,如腹壁脂肪、肠腔气体及胃前壁等干扰图像质量,较长穿刺路径,直接获得所需标本,从而提高穿刺取材的成功率及阳性率<sup>[17]</sup>。超声内镜穿刺活检诊断肿瘤的特异性高达97%~100%,敏感性在75%~95%<sup>[18-20]</sup>。针对无法区分15%<sup>[21]</sup>炎性或恶性胰头肿块,可选用特异性(100%)、敏感性(98.8%)更高的术中Tru-Cut<sup>[22]</sup>多点多组织穿刺活检。甚至可以结合免疫蛋白来区分自身免疫性胰腺炎<sup>[23]</sup>。

综上所述,胰头肿块型胰腺炎多具有以下临床及影像特征:病程较长,肿瘤标志物无明显升高(<300 U/mL),无广泛侵犯转移周围组织,胰腺广泛钙化、萎缩。针对临床和影像学鉴别困难者,可选择穿刺病理诊断方法。针对疑难病例,应选择诊断正确率高、患者受益大的多学科诊疗模式(MDT)<sup>[24-25]</sup>。

## 2 胰头肿块型胰腺炎的外科治疗

大多数情况下,尤其在疾病的早期,慢性胰腺炎多接受规范的内科保守治疗。外科治疗指征主要包括:常用于内科保守治疗失败;重症疾病;疼痛不可控制的胰腺炎;压迫邻近组织结构;胆道、主胰管、十二指肠中重度梗阻;不能排除胰腺癌<sup>[26-27]</sup>。手术原则为缓解症状并最大限度地保留胰腺内、外分泌功能。但是也有一些研究者认为慢性胰腺炎行早期手术能够延缓疾病进程,保留更多正常细胞<sup>[28-29]</sup>。希望现行的随机对照试验<sup>[30]</sup>能够给出较为确切的答案。随科学的进步,该手术也越来越多的被业界和社会所接受。

究其原因有三点：其一，胰头肿块型胰腺炎有发生癌变风险，手术处理可预防或根治早期肿瘤；其二，解决压迫及内外分泌功能紊乱引起症状和体征，效果确切；其三，近年来手术疗效和安全性不断提高，手术病死率 $<3\%$ <sup>[31]</sup>。其术式主要有胰十二指肠切除术、保留幽门的胰十二指肠切除术、保留十二指肠的胰头切除术等。

## 2.1 诊断不明胰头肿块型胰腺炎

胰十二指肠切除术和保留幽门胰十二指肠切除术较保留十二指肠的胰头切除术，切除范围广，清创组织多，针对早期肿瘤能做到彻底根治。而且既往研究<sup>[32-33]</sup>结论认为在绝大多数情况下，针对诊断不明的胰头肿块，尤其是恶性肿瘤可能性大的胰头肿块，行胰十二指肠切除术治疗，手术是利大于弊的，因其完成了早期肿瘤的根治，且术后胰腺内外分泌功能没有进一步减退，而生活质量得到明显改善。因此，我们建议对于术前诊断不明确者，可行胰十二指肠切除术。

## 2.2 诊断明确的胰头肿块型胰腺炎

由于传统胰十二指肠切除术和保留幽门胰十二指肠切除术的创伤大，并发症发生率高，术后生活质量下降明显<sup>[34]</sup>，所以针对诊断明确者行保留十二指肠的胰头切除术（DPPHR）是被推荐的<sup>[35]</sup>。保留十二指肠的胰头切除术具有以下优点<sup>[36-38]</sup>：（1）由于保留了胃、十二指肠及胆管生理功能，术后生活质量、疼痛缓解、营养状态均较胰十二指肠切除术好；（2）安全性较好，术后病死率低；（3）保留十二指肠的胰头切除术后胰腺内外分泌功能改变不明显。经典的保留十二指肠的胰头切除术，包括常见的Beger术式<sup>[39]</sup>、Frey术式<sup>[40]</sup>、和Berne术式<sup>[41]</sup>，和不常见的Izbicki术式<sup>[42]</sup>等。

比较Beger术式与胰十二指肠切除术，Beger术式除具有上述优点，还有术中大出血几率低于胰十二指肠切除术<sup>[43-44]</sup>。究其原因可能为离断胰腺颈部时损伤门静脉。Frey术式和Berne术式可避免这种可能。因此可根据肿块大小和影像学资料评估是否需要离断胰颈部，若不需离断，可选择Frey术式或Berne术式，否则选择Beger术式。此外，Beger术式能延缓胰腺组织内腺体损伤，但不能阻断<sup>[45-46]</sup>。虽然Frey术式具有上述优点<sup>[47]</sup>，但是Frey术式中胰头切除范围较小，术后仍有癌变可能<sup>[47-48]</sup>。因此若术前考虑恶性肿瘤可能性相对较

大患者，需行Beger术式或Berne术式。Berne术式与Beger术式和Frey术式相比，该术式操作相对简单，严重并发症较少，在缓解疼痛、保留内、外分泌功能等方面效果相近。因此Berne作为胰头肿块型胰腺炎诊断明确或相对不明确时首选外科手术方案。

综上所述，胰头肿块型胰腺炎行手术治疗利大于弊。诊断明确者以及肿块较小者，保留十二指肠的胰头切除术是被推荐的；诊断不明确者或肿块较大者，胰十二指肠切除术是被推荐的。术式应按照如下顺序选择：Berne术式、Frey术式、Beger术式、（保留或不保留）幽门的胰十二指肠切除。

总之，针对胰头肿块型胰腺炎，首先需通过临床表现、肿瘤标志物、影像检查、病理检查等联合考虑，然后根据影像资料、肿块大小和临床诊断选择合适手术方式，从而最大限度降低并发症，提高患者生活质量。

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