

介入超声辅助诊断鼻咽癌 肝脏转移1例

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摘要

鼻咽癌(NPC)是一种常见的头颈部恶性肿瘤, 在东南亚地区发病率较高。最常见的转移部位是肺、骨、肝和淋巴结。通常鼻咽癌肝转移预后较差。鼻咽癌肝转移常表现为多灶性结节。早期鼻咽癌肝转移, 在超声图像上表现为囊性结节; 进展期图像常以实性、富血供为主。目前转移性鼻咽癌的治疗基本上是姑息性的; 转移性鼻咽癌的治疗选择包括临床试验(首选)、铂基联合化疗或同步化疗、放疗; 围手术期行肝动脉灌注化疗联合肝脏转移瘤切除术, 可提高患者术后生存期。现有的新治疗方法中, 免疫检查点疗法在治疗复发或转移性疾病方面取得了突破性进展, 为鼻咽癌的治疗提供了广阔的前景。

关键词

鼻咽癌, 肝转移, 介入超声, 超声图像

A Case of Liver Metastasis of Nasopharyngeal Carcinoma Diagnosed with the Aid of Interventional Ultrasound

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Abstract

Nasopharyngeal carcinoma (NPC) is a common malignant tumor of the head and neck, with a high incidence in Southeast Asia. The most common sites of metastasis are lung, bone, liver and lymph nodes. Usually, the prognosis of liver metastasis from NPC is poor. Liver metastases from nasopharyngeal carcinoma often present as multifocal nodules. In the early stage of nasopharyngeal carcinoma liver metastasis, it appears as cystic nodules on ultrasound images; in the progressive stage, the images are often solid and rich in blood supply. Current treatment for metastatic nasopharyngeal carcinoma is essentially palliative; treatment options for metastatic nasopharyngeal carcinoma include clinical trials (preferred), platinum-based combination chemotherapy or concurrent chemotherapy and radiotherapy. Perioperative hepatic artery perfusion pump chemotherapy combined with liver metastasectomy may improve patient survival after surgery. Among the available new therapeutic approaches, immune checkpoint therapy has made breakthroughs in the treatment of recurrent or metastatic disease, offering a promising future for the treatment of nasopharyngeal carcinoma.

Keywords

Nasopharyngeal Carcinoma, Liver Metastasis, Interventional Ultrasound, Ultrasound Images

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1. 临床资料

患者男, 68 岁, 主因鼻咽癌术后放疗后 2 年, 六周期化疗后, 发现肝脏占位 1 周入院。自诉于 2018 年出现鼻塞伴流清涕, 于 2019 年 2 月、2019 年 03 月和 2020 年 2 月各行三次右侧鼻腔肿物切除术。术后病理示: (右侧上颌窦肿物)分化型鳞状细胞癌。术后于放疗科行鼻腔残余病灶辅助放疗 4 次。2021 年 1 月复查彩超提示肝继发恶性肿瘤, 后期病人及家属未遵医嘱进行治疗。同年 6 月再次复查腹部彩超示: “肝占位性病变, 胰腺占位性病变”, 现患者为求进一步明确诊断, 至普通外科门诊就诊, 患者自诉偶有腹痛、腹泻、心慌等症状。

体格检查: 血压 108/66 mmHg (1 mmHg = 0.133 kPa), 呼吸 18 次/min, 脉搏 79 次/min, 心率 87 次/min。

实验室检查: 鳞状上皮细胞癌抗原↑ 11.3 ng/ml; 甲胎蛋白 2.73 ng/ml; CA199↑ 154 ng/ml; 细胞角蛋白 19 片段测定↑ 12.18 ng/ml; 神经元特异性烯醇化酶↑ 108 ng/ml; 白蛋白↓ 38 g/L; 谷草转氨酶↑ 46 U/L; 谷氨酰转氨酶↑ 874 U/L; 碱性磷酸酶↑ 264 U/L。**超声检查:** 肝内多发囊性及低回声实性肿物, 多考虑转移, 请结合病史; 胰腺占位性病变, 多考虑 MT (图 1、图 2)。**CT 腹部及盆腔增强:** 肝内弥漫性转移瘤灶, 数目较前明显增多; 肝胃间隙、腹膜后多发淋巴结增大, 考虑转移, 胰腺受侵; 盆腔少量积液(图 3)。

MR 鼻部鼻窦增强: 右侧鼻腔恶性肿瘤术后, 右侧上颌窦、鼻窦软组织肿物, 考虑肿瘤复发; 右侧额窦病变, 多考虑囊肿; 右侧筛窦炎症(图 4)。患者入院后积极完善相关检查, 结合既往病史、实验室检查及影像学检查, 行超声引导下经皮经肝脏穿刺活检组织细胞检查, 以明确诊断。术前同患者及家属谈话, 交代目前患者病情, 告知手术风险及并发症并签署知情同意书。肝脏肿物组织病理结果回示: (肝脏组织) 结合临床病史及免疫组织化学染色结果: 转移性鳞状细胞癌(图 5)。

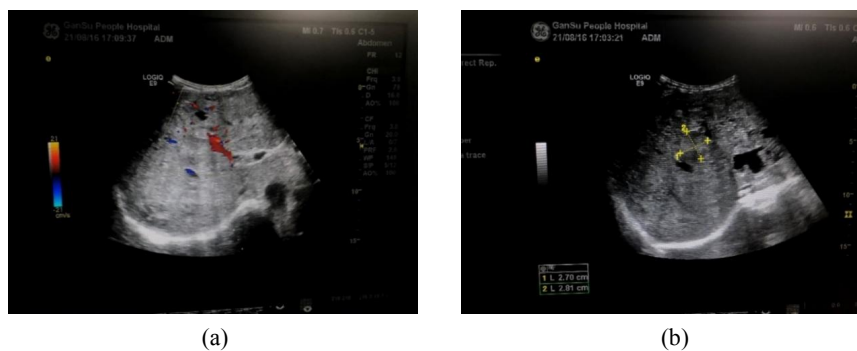


Figure 1. Color ultrasound (January 2021): several cystic and multiple cystic-solid mixed echogenic lesions were seen in the right lobe of the liver, some of which were separated within the capsule, some of which were seen as raised nodule-like echogenicity, and some of which had limited irregular thickening of the capsule wall; the boundaries of the nodules were still clear and the morphology was still regular, and the larger one was about 23×21 mm

图 1. 彩色超声提示(2021年1月): 肝右叶可见数个囊性及多个囊实性混合回声病灶, 部分囊内可见分隔, 部分可见突起结节样回声, 部分囊壁可见局限性不规则增厚; 结节边界尚清, 形态尚规则, 较大者约 23×21 mm



Figure 2. Color ultrasound (June 2021): multiple inhomogeneous hypoechoic solid masses in the liver with poorly defined borders and irregular morphology, the larger one located in the left lobe of the liver, measuring about 43×36 mm, with calcified echogenicity visible inside. The tail of the pancreas was seen as a hypoechoic solid mass of approximately 23×20 mm in size with poorly defined borders and irregular morphology, CDFI: blood flow signal was seen within and around it; Several abnormally enlarged lymph nodes were seen in the hepatic and gastric spaces and retroperitoneum with poorly defined dermal medulla and distorted longitudinal and transverse ratios, CDFI: lymphatic portal blood flow signal was not detected

图 2. 彩色超声提示(2021年6月): 肝内多发不均质低回声实质性肿物, 边界欠清, 形态不规则, 较大者位于肝左叶, 大小约 43×36 mm, 内可见钙化回声, CDFI: 内部及周边可见血流信号。胰尾可见大小约 23×20 mm 低回声实质性肿物, 边界欠清, 形态不规则, CDFI: 内部及周边可见血流信号; 肝胃间隙及腹膜后可见数个异常肿大淋巴结回声, 皮髓质界限不清, 纵横比例失常, CDFI: 未探及淋巴门血流信号

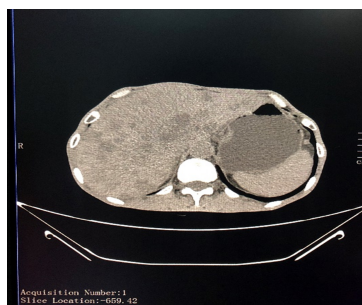


Figure 3. CT abdominal and pelvic enhancement: diffuse metastatic tumor foci in the liver, the number was significantly increased compared with before; multiple lymph nodes in the hepatogastric space and retroperitoneum were enlarged, metastasis was considered, and the pancreas was invaded; small amount of pelvic fluid was accumulated

图 3. CT 腹部及盆腔增强: 肝内弥漫性转移瘤灶, 数目较前明显增多; 肝胃间隙、腹膜后多发淋巴结增大, 考虑转移, 胰腺受侵; 盆腔少量积液

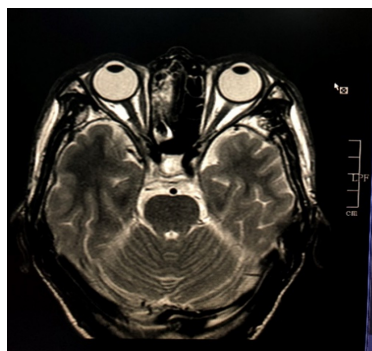


Figure 4. MR nasal sinus enhancement: postoperative malignant tumor in the right nasal cavity, soft tissue swelling in the right maxillary sinus and sinus, consider tumor recurrence; lesion in the right frontal sinus, mostly consider cyst; inflammation of the right septal sinus

图 4. MR 鼻部鼻窦增强：右侧鼻腔恶性肿瘤术后，右侧上颌窦、鼻窦软组织肿物，考虑肿瘤复发；右侧额窦病变，多考虑囊肿；右侧筛窦炎症

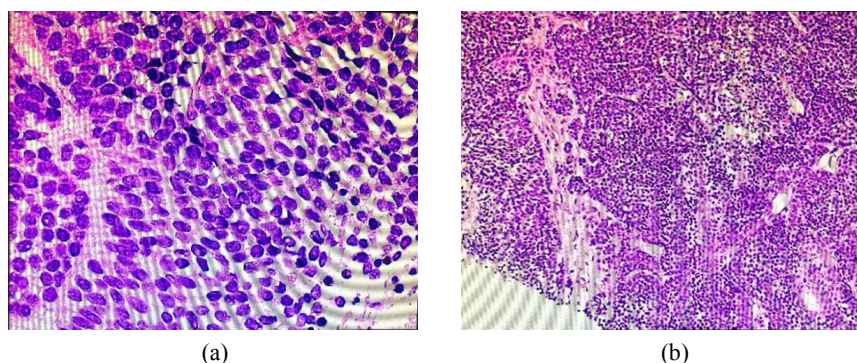


Figure 5. Pathological findings back: immunohistochemical staining results: 1) GPC-3 (-); 2) Herpae-1; (-); 3) CK19 (+); 4) CK7 (-); 5) CK5-6 (+); 6) P40 (+); 7) P63 (+); 8) CgA (-); 9) Syn (-); 10) CD56 (+); 11) KI-67 (index: 50%). (Liver tissue) Combined with clinical history and immunohistochemical staining results: metastatic squamous cell carcinoma

图 5. 病理结果回示：免疫组织化学染色结果：1) GPC-3 (-); 2) Herpae-1; (-); 3) CK19 (+); 4) CK7 (-); 5) CK5-6 (+); 6) P40 (+); 7) P63 (+); 8) CgA (-); 9) Syn (-); 10) CD56 (+); 11) KI-67 (index: 50%)。 (肝脏组织)结合临床病史及免疫组织化学染色结果：转移性鳞状细胞癌

2. 讨论

鼻咽癌(nasopharyngeal carcinoma, NPC)是一种常见的头颈部恶性肿瘤，在东南亚地区发病率较高。与其他头颈部肿瘤不同，鼻咽癌的局部复发或远处转移发生率较高，是导致患者死亡的主要原因[1]。最常见的转移部位是肺、骨、肝和淋巴结。通常鼻咽癌肝转移的患者，与骨转移或肺转移相较，预后较差[2]。有部分病例报道，鼻咽癌肝转移常表现为多灶性结节；早期鼻咽癌肝转移，在超声图像上表现为囊性结节为；进展期图像常以实性、富血供为主。目前转移性鼻咽癌的治疗基本上是姑息性的；转移性鼻咽癌的治疗选择包括临床试验(首选)、铂基联合化疗或同步化疗、放疗。国外文献报道[3]，对鼻咽癌肝转移患者，围手术期行肝动脉灌注(HAI)泵化疗联合肝脏转移瘤切除术，可提高患者术后生存期。现有的新治疗方法中，免疫检查点疗法在治疗复发或转移性疾病方面取得了突破性进展，为鼻咽癌的治疗提供了广阔的前景。

结合文献研究[4]，鼻咽癌的囊性肝转移灶是较为罕见的。鼻咽癌肝转移病灶的早期超声声像图特征：早期肝内多发病灶，体积较小，呈囊性及囊实混合性结节(囊性为主)，其囊壁多呈不规则性增厚，囊内可见分隔，囊壁上有乳头样突起；CDFI：部分结节可于囊壁、分隔处或囊壁突起处测得血流信号。进展期

彩色超声图像特征：肝内多发不均质低回声实性肿物，边界欠清，形态不规则，内可见钙化回声，CDFI：内部及周边可见血流信号。当静脉注射造影剂时，囊壁早期轻度增强，囊内分隔及囊壁凸起亦可见增强。囊性肝转移瘤通常来自结肠直肠癌、卵巢癌、胰腺癌、胃肠道间质瘤、黑色素瘤、肉瘤、神经内分泌肿瘤等。囊性转移是由于病变的快速生长超出了肝脏动脉血供的范围，导致中心坏死。病变的囊性是由于病变的快速生长超出了肝动脉血供，导致中心坏死。囊性肝转移灶特征：边界欠清或不清，隔膜不规则或不完整，内壁粗糙，内壁突起或不规则结节[5]。

此次病例，通过超声引导下的经皮经肝组织穿刺活检，病理结果回示后确诊。患者六周期化疗完成后，复查彩超提示鼻咽癌肝脏转移时，疏忽诊疗；进展期肝脏、胰腺、腹腔淋巴结等多发转移灶形成；使得病情及症状逐渐加重。由于肿瘤的耐药性可能会持续或复发，因此早期发现复发是很重要的，局部病灶复发的疾病亦有可能挽救；但是患者及医疗环境等因素，使得肿瘤局部复发的管理和诊疗成为肿瘤随访诊疗中的较大挑战。通常临床诊断将实验室检查指标及肿瘤影像学表现相结合，其中 CT、MRI 以及超声的协同至关重要；另一方面，对于腹部组织或浅表组织的诊断，超声检查、CT 和 MRI 等常规影像学方法，总是很难做出明确的诊断；进一步的超声引导下的组织穿刺活检是有必要的，其安全有效、稳定快捷、零辐射的优点，使其在影像学病理活组织取材诊疗中占有一席之地。

鼻咽癌囊性肝转移作为一种特殊罕见肿瘤生长形式，它的出现可能提示肿瘤病变的进展及预后不良倾向。术后、化疗后的早期随访和早期诊疗是必不可少的。同时，基于普通彩色超声诊断的基础上，超声引导下的组织穿刺活检术与 CT、MRI 联合应用于诊治鼻咽癌肝转移患者，不仅使其与其他肝良性病变的鉴别诊断中有重要的价值；同时对于治疗方案的抉择至关重要；同时需要提高对这种类型的鼻咽癌肝转移的识别和诊断水平。手术治疗层面，针对局部转移病灶治疗方面，TACE [6]可作为鼻咽癌囊性肝转移的首选诊疗方式。免疫检查点疗法在作为新型治疗起点，其在治疗复发或转移性方面具有前瞻性意义 [7]。

鉴别诊断：1) 临床疾病方面：① 原发性肝癌：多有乙型肝炎病史，强化方式表现为快进快出，肿瘤内常见坏死及出血，本病最终确诊主要依靠病理检查。② 结直肠癌肝转移：消化道肿瘤疾病史，肝内转移常为多发病灶，肿块呈典型牛眼征表现，肿瘤边缘增强，中央多为无增强的坏死区。③ 肝腺瘤：常见于口服避孕药的女性，图像上边界清，内部回声均匀。2) 彩色超声方面：① 肝脏单纯性囊肿：单个、囊壁薄、光滑透亮的囊性结构，内壁光滑，囊壁未见血流信号。多为先天性疾病，常见于肝囊肿、寄生虫性囊肿早期。② 肝脏复杂性囊肿：肝内多发、囊壁不规整，囊内回声欠均匀，囊内可见感染、出血等絮状、条索状回声，囊内可见分隔，囊内形成突起等。常见于炎症性，寄生虫性，创伤性疾病。

声明

本报道经患者及家属同意，并签署知情同意书。

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