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人类免疫缺陷病毒阴性的阴道残端浆母细胞淋巴瘤 一例并文献复习*

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摘要 目的:浆母细胞淋巴瘤(PBL)为罕见的、侵袭性极强的 B 细胞淋巴瘤,好发于 HIV 阳性患者的口腔,本文报道了目前国内外首例 HIV 阴性的原发于阴道残端的 PBL,并通过文献复习总结了 PBL 的临床病理学特征、诊断及鉴别诊断、治疗及预后。**方法:**回顾分析该病例的临床病理学资料,并结合国内外相关文献进行讨论。**结果:**该患者诊断明确,HIV 阴性,以阴道残端起病,免疫组化示 MUM-1 阳性,不表达 CD20、CD79a 和 PAX-5,Ki-67 阳性率 73%。EBER 原位杂交阴性。分子学诊断结果示:样品免疫球蛋白基因发生克隆性重排,未检测到 TCR 基因克隆性重排。CHOP 样方案疗效不佳,部分缓解后疾病快速进展。该患者从确诊至死亡时间为 10.3 个月。**结论:**PBL 罕见,病情进展迅速,预后差,生存期短,在进行阴道残端肿瘤的诊断及鉴别诊断时,阴道残端 PBL 应纳入鉴别范围。

关键词:浆母细胞淋巴瘤;人类免疫缺陷病毒;阴道残端

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A Case of Plasmablastic Lymphoma of the Vagina Stump without Human Immunodeficiency Virus Infection and Literature Review*

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ABSTRACT Objective: Plasmablastic lymphoma (PBL) was a rare, aggressive variant of B-cell lymphoma that frequently occurred in the oral cavity of patients with human immunodeficiency virus (HIV) infection. We reported the first case of HIV-negative PBL with initial presentation of the vagina stump to investigate the clinicopathological characteristics, diagnosis, differential diagnosis, treatment and prognosis of PBL. **Methods:** The relevant clinicopathological materials of PBL patient was retrospectively reviewed and a literature review was conducted. **Results:** The patient was explicitly diagnosed to be HIV negative with a vaginal stump mass as the main lesion. Immunohistochemical examination revealed that the tumor cells were positive for MUM-1, negative for CD20, CD79a and PAX-5. The Ki-67 proliferative index was 73%. The tumor cells were negative for EBV virus-encoded RNA in situ hybridization (EBER-ISH). Molecular diagnostic results showed immunoglobulin gene rearrangement in the sample analyzed. TCR gene rearrangement was not observed. CHOP-like regime showed no satisfactory effect and the disease progressed soon after a partial response. The patient died 10.3 months after the diagnosis. **Conclusions:** As PBL was a rare distinct variant with high malignancy, poor prognosis and shorter overall survival, it should be included as a differential diagnosis in cases of suspected vaginal stump tumor.

Key words: Plasmablastic lymphoma; Human immunodeficiency virus; Vagina stump

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前言

浆母细胞淋巴瘤(plasmablastic lymphoma, PBL)是一类罕见的、具有高度侵袭性的 B 细胞淋巴瘤,肿瘤细胞表现为类似于 B 免疫母细胞的大细胞弥漫性增殖,同时表达浆细胞相关抗原^[1]。1997 年,Delecluse 等首次报道了 16 例原发于口腔的伴有特殊免疫表型的侵袭性非霍奇金淋巴瘤,其中 15 例患者人类免疫缺陷病毒(HIV)阳性,这类肿瘤被称为浆母细胞淋巴瘤^[2]。

由于其特殊性,2008 版的 WHO 淋巴及造血系统肿瘤分类将其划归为弥漫大 B 细胞淋巴瘤(diffuse large B-cell lymphoma, DLBCL)的一种罕见亚型^[1]。PBL 常发生于 HIV 阳性患者的口腔,近年来,原发于口腔外且 HIV 阴性的 PBL 在国内外多有报道。本文报道了首例原发于阴道残端且 HIV 阴性的 PBL,并结合文献探讨 PBL 的临床病理学特征、诊断及鉴别诊断、治疗及预后。

1 病例资料

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患者,女,53岁。因“子宫全切术后1年半,左髋部疼痛5月,咳嗽1周入院”。患者于2008年5月因经期延长伴周期缩短4年于当地医院行全子宫切除+左侧阔韧带肌瘤剥除+阴道前后壁膨出、陈旧性会阴裂伤修补术。术后病理结果回报示子宫及阔韧带多发性平滑肌瘤。于2009年8月始无明显诱因出现左侧腰骶部、髋部及下肢疼痛,为持续性隐痛,伴左下肢凹陷性水肿,伴阴道排液及肛门下坠感,无明显阴道出血,1月内体重减轻5kg。于2009年12月就诊于西京医院。妇科查体:外阴:已婚已产式,发育正常;阴道:通畅,黏膜光滑,残端可见直径约2cm块状新生物,表面可见坏死物;宫颈、宫体缺如。三合诊:阴道残端可及4.5cm包块,双侧未达盆壁;直肠黏膜光滑,指套无血染。实验室检查:HIV阴性;乙肝五项全阴性; β -2微球蛋白3.10mg/L;乳酸脱氢酶195IU/L;铁蛋白473 μ g/L;血清蛋白电泳、免疫球蛋白定量、轻链定量未见明显异常。CT示:肝脏及右肾多发占位,左侧肾上腺结节符合转移瘤,胰头部转移瘤可能。MR示:阴道后壁腔内异常改变,结合病史,考虑阴道残端癌改变,盆腔内及双侧股骨、髌骨、胫骨病变,考虑转移可能。免疫组化结果(阴道残端,2009-12-25)回报示:MUM-1(+),CD20(-),CD79a(-),PAX-5(-),Ki-67阳性率73%,CD10(-),CD30(-),CD45(+/-),CD56(-),CD138(-),CD38(-),ALK(-),S-100(-),HMB45(-),AFP(-),EBER原位杂交(-);分子学诊断结果示:样品免疫球蛋白基因发生克隆性重排,未检测到TCR基因克隆性重排。骨髓活检提示淋巴瘤累及骨髓。结合形态学、免疫组化、基因重排结果及实验室检查,诊断为(2009-12-25):浆母细胞淋巴瘤,临床分期为IVB。患者于1月初就诊于西京医院血液科,行CHOPE方案化疗4疗程后达部分缓解(PR),再次行CHOPE方案化疗2疗程后病情进展(PD),盆腔MR可见10.4 $\times$ 10.6 $\times$ 10.2cm包块,确认病变性质后行盆腔局部放疗(61Gy/23次),复查盆腔MR提示包块缩小。后患者病情再次进展,于确诊本病后10.3个月死亡。

2 讨论

PBL是一类罕见的,好发于HIV阳性患者口腔的具有特殊免疫表型的B细胞淋巴瘤。近年来,文献有报道发生于皮肤、皮下组织、胃、肛周、肺、淋巴结等部位的HIV阴性PBL^[3]。本例是首例发生于阴道残端的HIV阴性PBL。

2.1 流行病学

根据文献报道,81%的PBL发生于HIV阳性患者,占有HIV相关淋巴瘤的2.6%^[4]。在HIV阴性患者中,29%的患者有其它方面的医源性免疫抑制,如因器官移植、自身免疫性疾病、恶性肿瘤等应用免疫抑制剂的患者^[5]。其余HIV阴性患者未发现处于免疫抑制的状态。PBL好发于成年男性,HIV阳性患者的中位发病年龄为38岁(男/女:7/1)^[6],HIV阴性患者的中位发病年龄为57岁(男/女:1.9/1)^[5]。

2.2 发病机制

PBL的发病机制仍未阐明,目前认为PBL起源于后生发中心的终末分化的活化B细胞,处于免疫母细胞转化成浆细胞的阶段,这些细胞已经历过类别转换和体细胞的高频突变^[9]。此过程中的染色体和细胞内分子信号通路异常可能导致了细胞恶变。

MYC基因重排是PBL中首个被发现的细胞遗传学异常,也是PBL中最常见的染色体结构异常^[7,8],在某种意义上和Burkitt淋巴瘤相似,不同的是后者起源于生发中心B淋巴细胞^[9]。Valera等采用荧光原位杂交(FISH)技术测得41例PBL中有20例发生了MYC基因重排,占49%,其中IgH基因是MYC基因重排的主要伙伴;31-41%的病例检测到了BCL2、BCL6、MALT1或PAX5基因扩增^[7]。MYC基因重排与PBL的浆母细胞形态及侵袭性的临床过程有关,在PBL的发病中起着重要的作用^[10]。其具体机制还需进一步研究。

EB病毒被认为与PBL的发病密切相关^[11]。在HIV相关的PBL病例中,74%的病例为EB病毒阳性;在HIV阴性的PBL病例中,这一百分比为54%^[5,6,12,13]。EB病毒作为最早被发现的与人类肿瘤相关的病毒,可在B淋巴细胞中形成潜伏感染,在机体免疫力下降时,激活且增殖^[14]。EB病毒感染导致PBL的原因,可能是由于CD4阳性T细胞持续减少,破坏了CD8阳性细胞毒性T细胞介导的抗病毒免疫,从而不能有效控制EB病毒感染的B细胞增生,在此过程中某个克隆增生形成优势,最终形成PBL^[15]。此外,少数病例并不伴有EB病毒感染,也没有免疫异常病史^[16]。

Notch1在淋巴祖细胞发育过程中的T系、B系选择中是重要的调节信号,可抑制B系淋巴细胞的特殊转录因子的表达,Seegmiller等发现,在9例PBL中免疫组化检测到Notch1均为阳性。因此,PBL的发生还可能与Notch1信号途径的活化有关^[17]。此外,由于不同文献得出了相互冲突的数据结果,PBL与人类疱疹病毒8型(HHV-8)的相关性还有待商榷^[18,19]。

2.3 临床特点

对于HIV阳性的PBL,口腔为典型的发病部位,口腔外发病部位最常见的是胃肠道、淋巴结和皮肤^[6]。在HIV阴性的PBL中,淋巴结外发病占82%,口腔和胃肠道也是最常见的原发部位^[5],但其在口腔的发病率(16%)明显低于HIV阳性病例(58%)^[20]。据文献报道,还有少数病例原发于中枢神经系统、副鼻窦、纵膈、肺、肝、睾丸等。本文报道的病例为首例发生于阴道残端的HIV阴性PBL。所有的PBL中,60%的病例发病时表现为临床III期或IV期;对于HIV阳性患者,临床分期呈双峰分布,超过80%的患者表现为I期或IV期^[9]。

2.4 诊断与鉴别诊断

浆母细胞淋巴瘤形态学上类似于B免疫母细胞或浆细胞的大型异型淋巴样细胞弥漫性增生,可见星空现象及凋亡小体,肿瘤细胞圆形或者椭圆形。免疫表型往往具有极典型的浆细胞表型(如CD138、CD38、MUM-1);但很少表达或弱表达B细胞标记物(如CD20、PAX-5)^[11];具有较高增殖活性(Ki67超过60%)^[21]。Colomo等认为PBL免疫表型差别大,MUM-1是唯一恒定的阳性指标^[12],本例PBL的免疫表型(CD138阴性、CD38阴性、MUM-1阳性)与上述结论一致。

PBL的肿瘤细胞的形态学特点及免疫表型容易与某些恶性疾病混淆,如除PBL以外的具有浆母细胞分化的大B细胞淋巴瘤,CD20及PAX-5阴性有助于排除其他类型的侵袭性B细胞淋巴瘤,CD30及ALK阴性则可与间变性大细胞淋巴瘤鉴别。PBL与浆母细胞骨髓瘤(plasmablastic plasma cell myeloma, PBPCM)在形态学上极为相似,并且两者有很多相同的免疫组

化特点,但治疗方法却不同,故其鉴别诊断十分重要。M 蛋白、骨质破坏的出现以及 CD56、cyclin D1 的表达常发生在 PBPCM 患者中;此外,CD10 在 69 % 的 PBL 患者中表达,而仅在 29 % 的 PBPCM 患者中表达^[18];EB 病毒编码的 RNA(EBER)在 PBPCM 患者中几乎均为阴性^[18]。有研究提出,PAX5、CD20 阴性或弱阳性,同时 Blimp-1、XBP-1 阳性可作为诊断 PBL 的可靠证据^[23]。

2.5 治疗及预后

有关 PBL 的治疗主要以早期化疗为主。目前,CHOP 或 CHOP 类似方案被广泛应用,可获得良好的总有效率,但伴随而来的是高复发率及低生存率^[23]。据文献报道,当采用比 CHOP 方案强度更大的治疗方案(如 EPOCH、HyperCVAD、或 CODOX-M/IVAC 方案)时,患者并未获得生存优势^[23]。在 HIV 阳性患者,辅以高活性抗逆转录病毒治疗(highly active antiretroviral therapy, HAART),可改善预后^[23]。有临床研究显示,应用硼替佐米单药或联合地塞米松、吉西他滨、奥沙利铂等治疗有效^[24],但尚无大宗病例报道,且均为暂时性缓解。在接受化疗的病人中总有效率达到 77 %,其中完全缓解占 46 %,部分缓解占 31 %,未接受化疗的病人中位生存期仅为 3 个月^[9]。PBL 总体预后差,HIV 阳性患者中位生存期为 15 个月,而 HIV 阴性患者的仅为 9 个月^[5,6]。据文献报道,年龄大于 60 岁、临床分期为Ⅲ期或Ⅳ期、骨髓浸润、未接受治疗、免疫抑制均是预后不良的因素^[5,9]。

综上所述,PBL 是非霍奇金淋巴瘤的一种特殊类型,好发于 HIV 阳性患者的口腔,随着国内外多例原发于口腔外 HIV 阴性 PBL 的报道,PBL 的定义将越来越宽泛。PBL 具有高度侵袭的生物学行为,因其临床特征不够典型,所以要结合临床特征、免疫表型和分子生物学特征等综合分析。本文报道了首例发生于阴道残端的 HIV 阴性 PBL 患者,发病时已为Ⅳ期,病情进展迅速,预后差,生存期短,因此,在进行阴道残端肿瘤的诊断及鉴别诊断时,PBL 应列入考虑,这对其诊断、预后评估及合理治疗均具有重要意义。

参考文献(References)

- [1] Stein H, Harris NL, Campo E. Mature B-cell neoplasms. WHO classification of tumours of haematopoietic and lymphoid tissues, 4th edn [M]. Lyon: IARC Press, 2008: 256-257
- [2] Delecluse HJ, Anagnostopoulos I, Dallenbach F, et al. Plasmablastic lymphomas of the oral cavity: a new entity associated with the human immunodeficiency virus infection[J]. Blood, 1997, 89(4): 1413-1420
- [3] Castillo JJ, Winer ES, Stachurski D, et al. HIV-negative plasmablastic lymphoma: not in the mouth[J]. Clin Lymphoma Myeloma Leuk, 2011, 11(2): 185-189
- [4] Carbone A, Gloghini A. Plasmablastic lymphoma: one or more entities [J]. Am J Hematol, 2008, 83(10): 763-764
- [5] Liu JJ, Zhang L, Ayala E, et al. Human immunodeficiency virus (HIV) -negative plasmablastic lymphoma: a single institutional experience and literature review[J]. Leuk Res, 2011, 35(12): 1571-1577
- [6] Castillo J, Pantanowitz L, Dezube BJ. HIV-associated plasmablastic lymphoma: lessons learned from 112 published cases[J]. Am J Hematol, 2008, 83(10): 804-809
- [7] Valera A., Balague O, Colomo L, et al. IG/MYC rearrangements are

- the main cytogenetic alteration in plasmablastic lymphomas [J]. Am J Surg Pathol, 2010, 34(11): 1686-1694
- [8] Dawson MA, Schwarzer AP, McLean C, et al. AIDS-related plasmablastic lymphoma of the oral cavity associated with an IGH/MYC translocation-treatment with autologous stem-cell transplantation in a patient with severe haemophilia-A[J]. Haematologica, 2007, 92(1): e11-2
- [9] Castillo J J, Reagan J L. Plasmablastic Lymphoma: A Systematic Review[J]. The Scientific World Journal, 2011, 11: 687-696
- [10] Taddesse-Heath L, Meloni-Ehrig A, Scheerle J, et al. Plasmablastic lymphoma with MYC translocation: evidence for a common pathway in the generation of plasmablastic features [J]. Mod Pathol, 2010, 23 (7): 991-999
- [11] Ferrazzo KL, Mesquita RA, Aburad AT, et al. EBV detection in HIV-related oral plasmablastic lymphoma[J]. Oral Dis, 2007, 13(6): 564-569
- [12] Colomo L, Loong F, Rives S, et al. Diffuse large B-cell lymphomas with plasmablastic differentiation represent a heterogeneous group of disease entities[J]. Am J Surg Pathol, 2004, 28(6): 736-747
- [13] Teruya-Feldstien J, Chiao E, Filippa DA, et al. CD20-negative large-cell lymphoma with plasmablastic features: a clinically heterogeneous spectrum in both HIV-positive and -negative patients [J]. Ann Oncol, 2004, 15(11): 1673-1679
- [14] Evans AS. Viral infections of humans: epidemiology and control, Plenum Publishing Corporation[M]. New York: Plenum Medical Book Company, 1976: 209-233
- [15] Foo WC, Huang Q, Sebastian S, et al. Concurrent classical Hodgkin lymphoma and plasmablastic lymphoma in a patient with chronic lymphocytic leukemia/small lymphocytic lymphoma treated with fludarabine: a dimorphic presentation of iatrogenic immunodeficiency-associated lymphoproliferative disorder with evidence suggestive of multiclonal transformability of B cells by Epstein-Barr virus [J]. Hum Pathol, 2010, 41(12): 02-08
- [16] 官兵, 张新华, 饶秋, 等. 口腔原发性浆母细胞淋巴瘤临床病理观察 [J]. 诊断病理学杂志, 2011, 18(3): 209-212
- Guan Bing, Zhang Xin-hua, Rao Qiu, et al. Clinicopathological features of oral cavity primary plasmablastic lymphoma [J]. J Diag Pathol, 2011, 18(3): 209-212
- [17] Seegmiller AC, Wang HY, Hladik C, et al. Uniform expression of Notch1, suppressor of B-cell-specific gene expression, in plasmablastic lymphoma[J]. Arch Pathol Lab Med, 2011, 135(6): 770-775
- [18] Vega F, Chang CC, Medeiros LJ, et al. Plasmablastic lymphomas and plasmablastic plasma cell myelomas have nearly identical immunophenotypic profiles[J]. Mod Pathol, 2005, 18(6): 806-815
- [19] Brown RS, Power DA, Spittle HF, et al. Absence of immunohistochemical evidence for human herpesvirus 8 (HHV8) in oral cavity plasmablastic lymphoma in an HIV-positive man [J]. Clin Oncol, 2000, 12 (3): 194
- [20] Castillo JJ, Winer ES, Stachurski D, et al. Clinical and pathological differences between human immunodeficiency virus-positive and human immunodeficiency virus-negative patients with plasmablastic lymphoma[J]. Leuk Lymphoma, 2010, 51(11): 2047-2053

- [8] VethrusM, Viddal B, Loose H, et al. Abdominale aortaaneurismer-endovaskulærørogåpen kirurgi, 2248-51. 161(6): 442-448
- [9] Franks S, Lloyd G, Fishwick G, et al. Endovascular treatment of d and symptomatic abdominal aortic aneurysms [J]. European journal of vascular and endovascular surgery, 2006, 31(2): 345-350
- [10] Greenhalgh R, Brown L, Kwong G, et al. Comparison of endovascular r aneurysm repair with open repair in patients with abdominal aortic aneurysm (EVAR trial 1), 30-day operative mortality results: randomised controlled trial[J]. Lancet, 2004, 364(6): 843-848
- [11] Greenhalgh R, Brown L, Epstein D, et al. Endovascular aneurysm repair and outcome in patients unfit for open repair of abdominal aortic aneurysm (EVAR trial 2): randomised controlled trial [J]. Lancet, 2005, 365(9): 2187-2192
- [12] Blankensteijn JD, de Jong SE, Prinssen M, et al. Two-year outcomes after conventional or endovascular repair of abdominal aortic aneurysms[J]. New England Journal of Medicine, 2005, 352(46): 2398-2405
- [13] Chahwan S, Comerota AJ, Pigott JP, et al. Elective treatment of abdominal aortic aneurysm with endovascular or open repair: the first decade [J]. Journal of vascular surgery: official publication, the Society for Vascular Surgery and International Society for Cardiovascular Surgery, North American Chapter, 2007, 45(1): 258-258
- [14] Lioupis C, Corriveau M-M, MacKenzie K, et al. Treatment of Aortic Arch Aneurysms with a Modular Transfemoral Multibranched Stent Graft: Initial Experience [J]. European Journal of Vascular and Endovascular Surgery, 2012, 34(8): 124-138
- [15] Canaud L, Demaria R, Joyeux F, et al. Endoluminal Treatment of Dissecting Aortic Arch Aneurysm After Surgical Treatment of Acute Type A Dissection[J]. Annals of Vascular Surgery, 2012, 26(1):715-719
- [16] 谢玉芳, 李芸. 主动脉夹层动脉瘤患者腔内隔绝联合血管旁路移植术后护理[J]. 中国护理学杂志, 2010, 65(23): 17-17
- Xie Yu-fang, Li Yun. Patients with aortic dissection aneurysm cavity insulated joint vascular bypass surgery Nursing[J]. Journal of Nursing (China), 2010, 65(23): 17-17
- [17] Sajid MS, Desai M, Haider Z, et al. Endovascular aortic aneurysm repair (EVAR)has significantly lower perioperative mortality in comparison to open repair: a systematic review[J]. Asian Journal of Surgery, 2008, 31(19): 119-123
- [18] 符伟国, 董智慧. 腹主动脉瘤的治疗方法 with 远期效果评价 -- 腹主动脉瘤的治疗方法 and 中远期效果评价 [J]. 中国现代手术学杂志, 2007, 11: 85-88
- Fu Wei-guo, Dong Zhi-hui. Abdominal aortic aneurysm treatment and long-term outcome evaluation of abdominal aortic aneurysm treatment and long-term effect evaluation[J]. Chinese journal of modern proc, 2007, 11(6): 85-88
- [19] Mohan I, Laheij R, Harris P. Risk factors for endoleak and the evidence for stent-graft oversizing in patients undergoing endovascular aneurysm repair[J]. European Journal of Vascular and Endovascular Surgery, 2001, 21(4): 344-349
- [20] Cao P, Verzini F, Parlani G, et al. Predictive factors and clinical consequences of proximal aortic neck dilatation in 230 patients undergoing abdominal aorta aneurysm repair with self-expandable stent-grafts[J]. Journal of vascular surgery: official publication, the Society for Vascular Surgery [and] International Society for Cardiovascular Surgery, North American Chapter, 2003, 37(11): 1200
- [21] Zarins CK, Bloch DA, Crabtree T, et al. Stent graft migration after endovascular aneurysm repair: importance of proximal fixation[J]. Vasc Surg, 2003, 38(4): 1264-1272
- [22] Suzuki S, Imoto K, Uchida K, et al. Ruptured Aneurysm Caused by an Endoleak 29 Months After Transluminal Endovascular Grafting for a Dissecting Aortic Aneurysm[J]. EJVES Extra, 2005, 10 (1): 70-73
- [23] Marone E, Mascia D, Coppi G, et al. Delayed Open Conversion after Endovascular Abdominal Aortic Aneurysm: Device-specific Surgical Approach[J]. European Journal of Vascular and Endovascular Surgery, 2013, 14(3): 43-48
- [24] Rodway A, Powell J, Brown L, et al. Do abdominal aortic aneurysm necks increase in size faster after endovascular than open repair?[J]. European Journal of Vascular and Endovascular Surgery, 2008, 35 (12): 685-693

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- [21] Kane S, Khurana A, Parulkar G, et al. Minimum diagnostic criteria for plasmablastic lymphoma of oral/sinonasal region encountered in a tertiary cancer hospital of a developing country [J]. J Oral Pathol Med, 2009, 38(1): 138-144
- [22] Montes-Moreno S, Gonzalez-Medina AR, Rodriguez-Pinilla SM, et al. Aggressive large B-cell lymphoma with plasma cell differentiation: immunohistochemical characterization of plasmablastic lymphoma and diffuse large B-cell lymphoma with partial plasmablastic phenotype [J]. Haematologica, 2010, 95(8): 1342-1349
- [23] Castillo JJ, Winer ES, Stachurski D, et al. Prognostic factors in chemotherapy-treated patients with HIV-associated Plasmablastic lymphoma[J]. Oncologist, 2010, 15(3): 293-299
- [24] Bibas M, Grisetti S, Alba L, et al. Patient with HIV-associated plasmablastic lymphoma responding to boezomib alone and in combination with dexamethasone, gemeitabine, oxaliplatin, cytarabine, and pegfilgrastim chemotherapy and lenalidomide alone[J]. J Clin Oncol, 2010, 28(34): 704-708