

上咽頭癌発生初期過程におけるEBウイルス遺伝子と細胞側遺伝子との関連性

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Detection of Epstein-Barr virus gene products, p53 protein and bcl-2 protein in nasopharyngeal carcinoma.

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Research Institution

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Research Abstract

Nasopharyngeal carcinoma (NPC), an epithelial tumor which is characterized by marked geographic and population differences in incidence, is consistently associated with the Epstein-Barr virus (EBV). Within the tumor, the EBV DNA is homogeneous and clonal with regard to repeat

sequences suggesting that the tumor is also clonal.

In this work we examined to detect EBV in formalin-fixed paraffin-embedded NPC specimens by using both polymerase chain reaction (PCR) for EBV-DNA and in situ hybridization for EBV-encoded small RNAs (EBERs). EBV-DNA was detected in none of 3 keratinizing squamous cell carcinomas (SCC), 22 of 24 non-keratinizing carcinomas (NKC), all 13 undifferentiated carcinoma (UNPC) and none of 2 adenocarcinomas (AC). EBERs were detected in none of 5 SCC, 30 of 32 NKC, 16 of 17 UNPC and none of 2 AC. As an additional study in situ hybridization using BHLF oligonucleotide probes and immunohistochemistry using monoclonal antibodies against LMP1, EBNA2, BZLF1 protein, p53 protein and bcl-2 protein were performed in 56 primary NPC. LMP1 was detected in 17 cases (30%) whereas EBNA2 was not detectable. Bcl-2 protein was positive in 50 cases (89%), but its expression did not depend on expression of LMP1, which did not demonstrate induction of bcl-2 by LMP1 as seen in vitro. Cytoplasmic BZLF1 expression was detectable in 18 cases (32%) whereas BHLF was positive only in 6 cases (11%). This finding suggests BZLF1 which disrupts viral latency dysfunctions despite of its expression. p53 protein was positive in 31 cases (55%), and there was a distinct correlation between expression of BZLF1 and p53 protein ($p < 0.001$). This finding suggests the interaction between BZLF1 and p53 which inactivates each other is one of tumorigenic factor in NPC

Research Products (17 results)

All Other

All Publications (17 results)

- [Publications] 中川士郎: "上咽頭癌頸部転移リンパ節の分子生物学的診断法に関する研究" 金沢大学十全医学会雑誌. 103. 265-275 (1994) ▼
- [Publications] 吉崎智一 他: "Epstein-Barrウイルス転写調節因子BZLF_1タンパクに関する研究" 耳鼻咽喉科・頭頸部外科. 67. 803-816 (1995) ▼
- [Publications] 室野重之 他: "上咽頭癌におけるEBER-1核内小RNAの検索" 耳鼻咽喉科臨床. 補8. 90-94 (1995) ▼
- [Publications] 吉崎智一 他: "ホジキン病におけるEBウイルスの検索" 耳鼻咽喉科臨床. 補85. 140-144 (1995) ▼
- [Publications] 室野重之 他: "上咽頭癌におけるEpstein-Barrウイルス遺伝子産物およびp53蛋白,bcl-2蛋白発現に関する研究" 金沢大学十全医学会雑誌. 105. 187-202 (1996) ▼
- [Publications] 古川 仍 他: "上咽頭癌におけるEBV遺伝子発現と抗EBV抗体価の関係について" 臨床病理. 44. 832-833 (1996) ▼
- [Publications] 古川 仍 他: "上咽頭癌におけるEBウイルスの検索" 日本臨床. 55. 76-79 (1997) ▼
- [Publications] 伊藤真人 他: "咽頭癌(予定)" JOHNS. 13. (1997) ▼
- [Publications] 竹下 元 他: "上咽頭癌の早期発現と治療(予定)" JOHNS. 13. (1997) ▼
- [Publications] M.Furukawa: "Gann Monograph on Cancer Research" (予定), (1997) ▼
- [Publications] S.Nakagawa: "A clinical study of molecular biological diagnosis of metastases to cervical node from nasopharyngeal carcinoma" J.Juzen Med Soc.103(2). 265-275 (1994) ▼
- [Publications] T Yoshizaki, M.Furukawa, H.Takeshita, Y.Yamazaki: "The study of Epstein-Barr (EBV) promoter-specific transactivator, BZLF1 protein" Otolaryng-Head and Neck Surg.(Tokyo). 67(9). 803-816 (1995) ▼
- [Publications] S.Murono, T.Yoshizaki, M.Furukawa: "Detection of EBER-1 in nasopharyngeal carcinoma" Pract.Otol.(Kyoto). 88(11)Suppl.85. 90-94 (1995) ▼
- [Publications] T.Yoshizaki, S.Murono, Qing Hua Wen, M.Furukawa: "Detection of Epstein-Barr virus in Hodgkin's lymphoma" Pract.Otol.(Kyoto). 88(11)Suppl.85. 140-144 (1995) ▼
- [Publications] S.Murono: "Detection of Epstein-Barr virus gene products, p53 protein and bcl-2 protein in nasopharyngeal carcinoma" J.Juzen Med Soc.105. 187-202 (1996) ▼
- [Publications] M.Furukawa, I.Nagayama, S.Murono, H.Takeshita, T.Nishimura, T.Yoshizaki: "Interaction Between Epstein-Barr virus (EBV) gene expression and antibodies to EBV in nasopharyngeal carcinoma" Jap.J.of Clin.Pathol. 44(9). 832-833 (1996) ▼

[Publications] M.Furukawa, S.Murono, S.Nakagawa, H.Takeshita, T.Yoshizaki: "Detection of Epstein-Barr virus genomes in nasopharyngeal carcinoma" Japanese J.Of Clinical Medicine. 55(2). 76-79 (1997) ▼

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