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Successful treatment of an inoperable pancreatic and colon cancer patient with Taheebo extract and chemotherapy.

Yoshio TAKEDA
Takeda Internal and Gastrointestinal Clinic

【ABSTRACT】A 58 year-old man affected by both inoperable pancreatic cancer and colon cancer was treated with chemotherapy gemcitabine and TSl. FRx6 which contains six-fold effective ingredient NQ801, was also given simultaneously. Partial response of both pancreatic and colon cancer was obtained by chemotherapy and FRx6. Further examination of combined therapy will be needed.

【Key words】Taheebo extract, NQ801, pancreatic cancer

Introduction

"Taheebo" is hot-Water extract taken from the bark of the Tabebuia avellanedae tree of the Bignoniaceae family found in Brazil of South America and it is widely used as a folk remedy for variety diseases in Brazil[1]. Ueda, et al, reported that naphthoquinone, a Taheebo tea extract, inhibited the activation of the initial expression of TPA-induced EB virus and it also inhibited tumor promoter activity in vitro[2]. Its physiologically powerful and effective ingredient is 5-hydroxy-2-(1-hydroxy-ethyl)-naphtho [2, 3b] furan-4, 9-dione and its code name is NQ801. This effective ingredient is extracted from the Tabebuia avellanedae (Taheebo) trees those are native to a specific area[2,3]. Regression of double cancer was observed in a patient affected by both inoperable pancreatic cancer and colon cancer after Taheebo extract FRx6[3], in which the concentration of NQ801 was multiplied by six, was simultaneously administered with gemcitabine and TSI chemotherapy. Therefore, this case is reported.

Methods

A 58-year-old man was diagnosed as both inoperable Stage IVb pancreatic head cancer and advanced ascending colon cancer which were double primary cancer at a certain hospital on November 10, 2008. Treatment was started from the end of November 2008, with gemcitabine administration twice in two weeks, however, no gemcitabine was given in the following one week. Four capsules of TS1 were also given per os everyday for two weeks simultaneously, however, no TS1 was given for the following one week. This treatment was repeated every three weeks.

On November 28, 2008, CA19-9 tumor marker level was 895 μ/mL. There was an irregular low echogenic tumor in the pancreatic head, which corresponded to pancreatic cancer of 32.4×35.7 mm in size.

From December 14, 2008 to June 23, 2009, the patient obtained Taheebo extract FRx6 from a company and he took it per os.

On December 27, 2008, the CA19-9 tumor marker level was 42 μ/mL.

On January 24, 2009, the size of the pancreatic head cancer was 30.4×21.5 mm.

On February 28, 2009, the size of the pancreatic head cancer was 15.8×13.4 mm.

On March l0, 2009, the CA19-9 tumor marker level normalized to 4.9 μ/mL.

On March 28, 2009, the size of the pancreatic bead cancer was 13.5×10.5 mm.

On May 12, 2009, the CA19-9 tumor marker level was 4.4 μ/mL.

On May 30, 2009, the pancreatic cancer could not be detected in an abdominal ultrasound sonography.

In June 2009, the pancreatic head cancer was not almost seen with CT scan test either, and partial response (PR), very close to complete response (CR), was observed. The advanced colon cancer was also markedly reduced to a tiny scar lesion and it was also evaluated as PR.

Results

One case of a double primary cancer patient affected by both inoperable pancreatic head cancer and advanced colon cancer resulted in tumor regression as PR after FRx6 was simultaneously administered during gemcitabine and TSI chemotherapy.

Discussion

Taheebo extract from Tabebuia avellanedae contained the active ingredient "NQ801" and displayed direct action on cancer cells such as selective toxicity, apoptosis induction, angiogenesis inhibition, and inhibition of both metastasis and invasion potential[4,5]. It also had immunostimulatory effect as indirect action[4,5]. Complete regression in a patient with end stage hepatocellular carcinoma and liver cirrhosis has already reported after ingestion of Taheebo tea[6]. According to Sudo[7] et al, in a Phase II trial on advanced pancreatic cancer by using both gemcitabine and TSl in 21 subjects resulted in PR assessment for 2 patients (9.5%), stable disease (RECIST：Response Evaluation Criteria In Solid Tumors) for 9 patients (43%), with CA19-9 1evel decreasing at least 50% in 5 of 18 subjects. When oxaliplatin and gemcitabine were concurrently administered to 43 colon cancer patients, one case resulted in PR8. According to Taiho Pharmaceutical, in a Phase II trial of colon cancer using TSl, while there were no CR results, 42 subjects out of 129 (32.6%) were evaluated as PR. On the other hand, it was reported that, when β-Lapachone, one substance of naphthoquinone compaound, a NQ801-1ike compound, was used concurrently with taxol, β-Lapachone had a synergistic anti-tumor effect and no side effects were observed in the mice themselves[9]. It can be thought that the tumor regression in the double primary cancer of inoperable pancreatic cancer and advanced colon cancer experienced this time was due to effect of both the gemcitabine and TSl mainly, however, the synergistic effect of FRx6 cannot be excluded. Moreover, the fact that the anti-tumor effect of β-Lapachone and taxol is synergistic9 suggests the possibility of a synergistic effect with chemotherapy and FRx6. NQ801 is a substance discovered by Japanese scientists[2,8] and it is expected that various clinical trials will be conducted in the future.

Literature

1) Walter Radames Accorsi. Miracles of Taheebo extract. Kobe Shimbun Publishing Center. 1988; 48.
2) Ueda S, Umemura T, Dohguichi K, et al. Production of anti-tumor promoting furanonaphthoquinones in Tabebuia Avellanedae cell culture. Phytochemistry 1994; 36: 323-325.
3) Hirata S. Clinical examination of NQ801 extracted from Taheebo in integrative medicine for cancer. International journal of Integrative Medicine 2010；2 (1)：119-127.
4) Ebina T. Anti-tumor effect of hot water extract of Taheebo, Tabebuia avellanedae grown in South America. Biotherapy 1998；12：495-500.
5) Ebina T. Anti-tumor effect of hot water extract of Taheebo comparing with other biological substances. Biotherapy 2002; 61: 321-327.
6) Takeda Y, Togashi H, Shinzawa H, et al. Spontaneous regression of hepatocellular carcinoma and review of literature. J Gastroenterol Hepatol. 2000; 15(9): 965-966.
7) Sudo K, Yamaguchi T, Nakamura K, et al. Phase II study of S-1 in patients with gemcitabine-resistant advanced pancreatic cancer. Cancer Chemother Pharmacol. 2011; 67 (2): 249-254.
8) Shibata S, Chow W, Frankel P, et al. A phase I study of oxaliplatin in combination with gemcitabine: correlation of clinical outcome with gene expression. Cancer Chemother Pharmacol. 2007; 59(4):549-557.
9) Pardee AB, Li YZ, Li CJ, et al. Cancer therapy with beta-lapachone. Curr Cancer Drug Targets. 2002; 2(3): 227- 242.

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手術不能膵臓癌と進行大腸癌の重複癌に対して抗癌剤とタヒボ抽出物を併用した一例

武田　義雄

武田内科胃腸科医院

本掲載内容は、研究報告者らの許諾を得て、学術論文誌「日本補完代替医療学会誌 Vol.8 No.2」（2011 年／日本）に発表された内容を再編集したものです。

【要旨】南米産樹木タヒボ茶は、Tabebuia avellanedae の樹皮の熱水抽出物である。手術不能膵臓癌と進行大腸癌の重複癌症例に対する gemcitabine とＴＳ１による化学療法施行時に、抗腫瘍活性を持つＮＱ801 の成分を６倍増量したタヒボ茶ＦＲ×６を併用摂取する症例を経験した。結果は膵臓癌と大腸癌共に著明に縮小し、Partial Response（ＰＲ）であった。今後更にＦＲ×６と化学療法との併用効果は検討されるべきであろう。

【キーワード】タヒボ茶、ＮＱ801、膵臓癌

1. はじめに

南米産樹木茶タヒボ（Taheebo）は、ノウゼンカズラ科の学名Tabebuia avellanedaeの樹皮の熱水抽出物で、南米ブラジルでは民間治療薬として種々の疾患に対し広く用いられている[1)]。上田らは、タヒボ茶抽出物ナフトフランジオンがＴＰＡ誘発ＥＢウイルス初期発現の活性化を抑制し、in vitroで発癌プロモーター活性を阻害することを報告している[2)]。特定地域に自生する天然木 Tabebuia avellanedae（Taheebo）から抽出された、生理活用の強い化学構造式の5-hydroxy-2-(1-hydroxy-ethy1)-naphtho[2,3b]furan-4,9-dione（成分コードネームＮＱ801）がその有効成分である[2,3)]。今回 gemcitabineとＴＳ１の化学療法に、ＮＱ801の濃度を６倍に高めたタヒボ抽出物ＦＲ×６[3)] を併用摂取したところ、手術不能膵臓癌と大腸癌の重複癌が共に退縮した症例を経験したので報告する。

2. 症例

【58 歳男性】

病歴：平成 20 年 11 月 10 日某病院で手術不能な膵頭部癌 Stage IVb と診断された。上行結腸に進行大腸癌も存在する重複癌症例であった。

平成 20 年 11 月下旬から gemcitabine を３週間の内２回摂取、１回休みで摂取し、ＴＳ１を１日４カプセル２週摂取し、１週休む治療を開始した。その後も化学療法を継続した。

平成 20 年 11 月 28 日腫瘍マーカーＣＡ19−9 は 895μ/ml で、膵頭部に不整な低エコーを呈し、大きさが 32.4×35.7ｍｍの膵癌だった。

平成 20 年 12 月 14 日から平成 21 年 6 月 23 日まで、患者が取り寄せ、タヒボＦＲ×６を摂取開始。

平成 20 年 12 月 27 日ＣＡ19-9 は 42μ/ml。

平成 21 年 1 月 24 日膵頭部腫瘍は 30.4×21.5ｍｍ。

平成 21 年 2 月 28 日膵頭部腫瘍は 15.8×13.4ｍｍ。

平成 21 年 3 月 10 日ＣＡ19-9 は 4.9μ/ml と正常化した。

平成 21 年 3 月 28 日膵頭部腫瘍は 13.5×10.5ｍｍ。

平成 21 年 5 月 12 日ＣＡ19-9 は 4.4μ/ml。

平成 21 年 5 月 30 日膵癌は腹部超音波検査で確認出来なかった。

平成 21 年 6 月 CT Scan で膵臓の腫瘍をほとんど指摘出来ず、殆ど Complete Response(CR) に近い Partial Response(PR) とした。大腸癌も痕跡程度になる程著明に縮小し PR となった。

3. 結果

gemcitabine と TS1 による化学療法中に、FR×６を併用した所、手術不能膵臓癌と進行大腸癌の重複癌が共に PR となった１例を経験した。

4. 考察

有効成分 NQ801 を含有する Tabebuia avellanedae（Taheebo）は、癌細胞に対する直接作用として、選択毒性、アポトーシス誘導、血管新生阻害や転移浸潤能抑制があり [4,5]、間接作用として免疫賦活作用が報告されている [4,5]。タヒボ茶服用後に末期の肝細胞癌が消失した例も報告されている [6]。Sudo[7] らによると、gemcitabine と TS1 による進行膵臓癌の PhaseⅡ試験で、21 例の内 2（9.5％）例で PR、9（43％）で stable disease(RECIST:Response Evaluation Criteria In Solid Tumors) であり、CA19-9 が 50% 以上低下したのは 18 例の内 5 例（28％）であった。43 例の大腸癌患者に oxaliplatin と gemcitabine の併用投与で PR は１例だった [8]。大鵬薬品によると TS1 による大腸癌の PhaseⅡ試験では CR はなく、129 例中 42 例（32.6％）が PR であった。一方、NQ801 の類似化合物であるナフトキノン系化合物のβ- ラパチョンは、taxol と併用すると相乗効果の抗腫瘍効果を持つが、マウス自身は副作用がない事が報告されている [9]。今回経験した手術不能膵臓癌と進行大腸癌の重複癌腫瘍退縮は gemcitabine と TS1 による所が大きいと思われるが、FR×6 との相乗効果も否定できない。事実、β- ラパチョンと taxol の抗腫瘍効果が相乗的である事 [9] は、その FR×6 の化学療法との相乗効果を持つ可能性を示唆する。NQ801 は日本の学者が発見した物質であり [2,3]、今後は様々な臨床試験が行われることが期待される。

参考文献

1) ウォルター・ラメダス・アコーシ、奇跡の葉木　タヒボ、神戸新聞総合出版センター、1988：48.

2) Ueda S, Umemura T , Dohguichi K, et al. Production of antitumor promoting furanaphthoqinones in Tabebuia Avellanadae cell culture, Phytochemistry 1994;36:323-325.

3) 平田章二、がん統合医療におけるサプリメントの Dose dependence とその安全性の考察、南米薬用植物タベブイアアベラネダエ（通称タヒボ）の使用経験から、国際統合医療学会誌、2010；2（1）：119-127

4) 海老名卓三郎、南米産樹木茶タヒボ抽出物の抗腫瘍効果、Biotherapy 1998;12:495-500.

5) 海老名卓三郎、南米産樹木茶タヒボ抽出物の抗腫瘍効果―他生物製薬との比較―Biotherapy 2002;61:321-327.

6) Takeda Y, Togashi H,Shinzawa H,et al.Spontaneous regression of hepatocellular carcinoma and review of literature.J Gastroenterol Hepatol 2000;15 (9):965-966.

7) Sudo K, Yamaguchi T,Nakamura K,et al. Phase Ⅱ study of S-1 in patients with gemcitabine-resistant advanced pancreatic cancer. Cancer Chemother Pharmacol 2011;67 (2):249-254.

8) Shibata S,Chow W,Frankel P,et al.A phase I study of oxaliplatin in combination with gemcitabine:correlation of clinical outcome with gene expression.Cancer Chemother Pharmacol 2007;59 (4):549-557.

9) Pardee AB,Li YZ,LI CJ.Cancer therapy with beta-lapachone.Curr Cancer Drug Targets2002;2(3):227-242.