出國報告

出國開會心得報告

服務機關：台中榮總放射腫瘤部
姓名職稱：林進清、部主任
派赴國家：奧地利 維也納
出國期間：民國 106 年 5 月 3 日至 5 月 11 日
報告日期：民國 106 年 5 月 21 日

摘要

歐洲放射腫瘤學會(縮寫 ESTRO)聯合學術年會，英文全名爲 European Society for Therapeutic Radiotherapy & Oncology 是一個非營利性科學組織，目的在提升放射腫瘤學的合作，以及癌症的整合性治療，以改善病人的照護爲目標。ESTRO 超過 5000 位全球會員，包含放射腫瘤學專業人士如放射腫瘤科醫師、醫學物理學家、放射生物學家、放射腫瘤專業護理師和放射師等，爲歐洲放射腫瘤學界最大最重要的一個學術交流平台，也是全球二大放放射腫瘤學界學術組織(另一個爲美國放射腫瘤學會(ASTRO，American Society for Therapeutic Radiotherapy & Oncology)。本次大會內容包羅萬象例如放射治療、臨床轉譯醫學、放射物理學、放射生物學、最新的放射免疫治療…等新知識。

關鍵字：放射治療

目次

本文

一、 **目的**：參加國際學術會議，吸收最新研究知識與趨勢。

二、 **過程**：會議日期自 2017 年 5 月 5 日至 5 月 9 日。

三、 **心得**：

歐洲放射腫瘤學會(縮寫 ESTRO)聯合學術年會，英文全名爲 European Society for Therapeutic Radiotherapy & Oncology 是一個非營利性科學組織，目的在提升放射腫瘤學的合作，以及癌症的整合性治療，以改善病人的照護爲目標。ESTRO 超過 5000 位全球會員，包含放射腫瘤學專業人士如放射腫瘤科醫師、醫學物理學家、放射生物學家、放射腫瘤專業護理師和放射師等，爲歐洲放射腫瘤學界最大最重要的一個學術交流平台，也是全球二大放放射腫瘤學界學術組織(另一個爲美國放射腫瘤學會(ASTRO，American Society for Therapeutic Radiotherapy & Oncology)。本次大會內容包羅萬象例如放射治療、臨床轉譯醫學、放射物理學、放射生物學、最新的放射免疫治療…等新知識，尤其是下列細項的探討：MR 引導放射治療、用於精確放射腫瘤學的放射學和成像數據庫、從大數據到更好的放射治療、放射治療創新的成本和價值、質子放射治療中的挑戰、是否有在高精度 IGRT/IMRT 時加強近距離放射治療的地位、根據新的 III 期試驗數據選擇患者和 APBI 的放射治療技術、前列腺癌低分化的臨床證據是什麼、子宮內膜異位症、放射治療加免疫治療組合、免疫治療、靶向腫瘤異質性、反應適應治療、患者報告放射治療的結果、多模態 IGRT 和 ART 的安全性和臨床和成本效益、臨床影響等待時間、增加放射腫瘤學安全性的策略…等。

本次大會依往例特別安排了許多會前教育課程(pre-meeting courses)，互動式腫瘤靶區勾劃課程(Contouring workshop)，以及特別獨立給年輕放射腫瘤科醫師學習者的 young lecture sessions。

本人和本院訓練出來的放射腫瘤年輕專科醫師吳清德(現任職彰化秀傳醫院)、施怡婷(嘉義聖馬爾定醫院)參加此次年會，共發表三篇本院治療過頭頸癌研究報告，獲得大會接受。我的論文題目爲「放療前血漿 EB 病毒狀態對鼻咽癌病人長期預後之影響」，分析 931 例新診斷鼻咽癌病人長期治療結果，並依治療前血漿 EB 病毒偵測到與否，可明確區分病人預後，將儘快謝成完整論文投稿 SCI 期刊。

此次會議地點在奧地利維也納，維也納鄰近多瑙河，是一個優美的音樂之都，地鐵、地面電車、公車建置完整，交通發達，是一個具有百萬人口的世界級大都市，市民生活水平與道德水準很高，例地鐵、地面電車、公車、火車進出站都沒有門禁或驗票，但市民都會自動買票，很少有人貪便宜不買票，也因自由心證進出車站，不會造成進出車站剪票口或出口驗票擁擠反而浪費大家時間。本次開會地點Messe Wien Exhibition & Congress Center是一個寬敞明亮、動線流暢、集合許多大小不一的會議室和大型展覽場，走出地鐵站不到一分鐘之處，是歐洲適合舉辦大型國際學術研討會或商業展覽會的場地之一。

四、 建議事項：

(1)本部多年來在頭頸癌的治療成績與歐洲先進國家相近，可能是英文寫作比歐美國家相對困難，加上台灣醫師臨床工作量遠多於歐美國家，因此發表於學術期刊的研究論文數目相對較少，實在可惜，未來會繼續多鼓勵年輕醫師多做研究及寫論文發表，提升本部及本院之研究成績；(2)這次主辦國及城市-奧地利的維也納，市容整潔，市民道德水準高、治安良好，值得台灣學習；(3)感謝院方長官的支持，參加高水準的國際學術會議，對本院訓練出來的放射腫瘤年輕專科醫師國際視野的提升以及未來學術研究的動力有所助益。

五、 附錄

(1)本人發表壁報論文摘要及詳細內容

Long-term prognostic impacts of pretreatment plasma EBV DNA status in nasopharyngeal carcinoma

Purpose:

To investigate the prognostic impacts of pretreatment plasma EBV (pEBV) DNA in patients with nasopharyngeal carcinoma.

Materials and Methods:

The study population consisted of 931 previously untreated, biopsy-proven, and no distant metastasis NPC patients who finished curative radiotherapy with/without chemotherapy at our department. The pre-treatment pEBV DNA level was measured by the real-time quantitative polymerase chain reaction. We analyzed the relationship between the pEBV DNA status and clinical characteristics. Various survival curves were compared between the patients with detectable and undetectable pEBV DNA by the Kaplan-Meier method.

Results:

EBV DNA signal (> 0 copies/mL) was detected in 90.8% (845/931) NPC patients' plasma before treatment. The percentages in patents with undetectable EBV DNA were inversely associated with presenting stages (24.6% for stage I/II, 8.5% for stage III and 2.8% for stage IV, P<0.001). The pEBV DNA levels were positively correlated with clinical stage (P<0.001). The age, gender, and pathological type between the patients with detectable and undetectable pre-treatment pEBV DNA were similar. However, patients with detectable pre-treatment pEBV DNA had relatively poor performance status, advanced T-classification, advanced N-classification, and advanced overall stage than those with undetectable pEBV DNA. The overall survival (HR=0.4413, 95% CI = 0.29-0.67, P=0.0004, 10-year rate = 62.2% vs. 90.3%), neck failure-free survival (HR=0.3285, 95% CI = 0.12-0.93, P=0.0397, 10-year rate = 94.4% vs. 100%), and distant metastasis-free survival (HR=0.3751, 95% CI = 0.23-0.62, P=0.0002, 10-year rate = 79.9% vs. 97.7%) were significantly lower in patients with detectable pEBV DNA than in those with undetectable pEBV DNA. The local failure-free survival was similar between both subgroups (HR=0.8740, 95% CI = 0.46-1.67, P=0.9362, 10-year rate = 85.6% vs. 89.2%).

Conclusion:

NPC patients presented with detectable pEBV DNA before treatment were associated with higher clinical stages and significant worse survivals.

Long-term prognostic impacts of pretreatment plasma EBV DNA status in nasopharyngeal carcinoma

PO-0611

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Abbreviations: HPV, human papillomavirus; OPC, oropharyngeal carcinoma; EBV, Epstein-Barr virus; NPC, nasopharyngeal carcinoma; p, plasma; RT, radiotherapy

INTRODUCTION

Head and neck cancers include a heterogeneous subgroup of different tumors. Some of head and neck cancers have been proven as virus-associated, such as HPV in OPC, EBV in NPC. The detection rates of pEBV DNA in NPC before treatment varied greatly in different studies and its prognostic impact have never been reported.

PURPOSE

To investigate the detection rate of pEBV DNA in newly diagnosed NPC patients and compare the long-term outcome in patients with/without pEBV DNA before treatment.

MATERIALS AND METHODS

The study population consisted of 931 previously untreated, biopsy-proven, and no distant metastasis NPC patients who finished curative RT with/without chemotherapy. The pre-treatment pEBV DNA level was measured by the real-time quantitative polymerase chain reaction.

RESULTS

Table 1. Patient Characteristics according to the status of pre-treatment pEBV DNA (n=931)

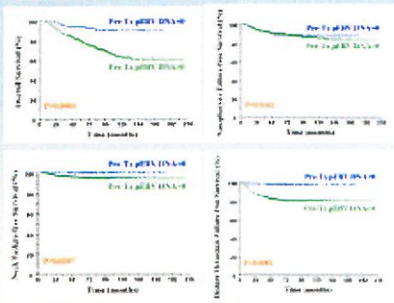
Characteristics	Pre-treatment pEBV DNA status				P
	Detectable (> 0 copy/mL) n=845		Undetectable (= 0 copy) n=86		
	No.	%	No.	%	
Median age, year	46		47		0.293
95% CI	15-84		23-83		
Sex					0.833
Male	610	72.2	63	73.3	
Female	235	27.8	23	26.7	
Pathology (WHO)					0.093
Type I	8	0.9	3	3.5	
Type II	615	72.5	58	67.4	
Type III	224	26.5	25	29.1	
Karnofsky scale					0.005
≥90%	257	30.4	39	45.3	
<90%	588	69.6	47	54.7	
T classification					<0.001
T1-2	421	49.8	66	76.7	
T3	210	24.9	11	12.8	
T4	214	25.3	9	10.5	
N classification					<0.001
N0-1	235	26.6	49	57.0	
N2	404	47.8	34	39.5	
N3	206	25.6	3	3.5	
Overall stage					<0.001
I-II	135	16.0	44	51.2	
III	335	39.6	31	36.0	
IV	375	44.4	11	12.8	

Table 2. Patterns of Failure (median follow-up 99 months)

Failure site(s)	Pre-treatment pEBV DNA status		P
	Detectable (n=845)	Undetectable (n=86)	
T	56	9	
N	15	0	
M	126	1	
T+N	10	0	
T+M	23	1	
N+M	10	0	
T+N+M	4	0	
Total failure in T	91 (10.8%)	10 (11.6%)	0.807
Total failure in N	39 (4.6%)	0 (0.0%)	0.042
Total failure in M	161 (19.1%)	2 (2.3%)	<0.001
Relapse rate	**242 (28.6%)**	**11 (12.8%)**	**0.002**

Abbreviations: T = nasopharynx; N = neck; M = distant metastasis

Survivals



CONCLUSIONS

1. We can detect circulating EBV DNA in 90.8% of newly diagnosed NPC patients, higher than other studies.
2. The presence/absence of EBV DNA before treatment affects outcomes significantly.
3. NPC patients presented with detectable pEBV DNA before treatment were associated with a poor performance status and a higher clinical stage, resulting in significant worse survivals.

(2)參加證明書

ESTRO

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CERTIFICATE OF ATTENDANCE

THIS IS TO CERTIFY THAT

Prof. Dr. Lin Jin-Ching

has attended the

ESTRO 36 Congress

Vienna, Austria, 5-9 May 2017

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Prof. Dr. Lin Jin-Ching has earned .... CME credits at this event. (Please fill out the number of hours you attended the conference.)

Yolande Lievens
ESTRO 36 Chair