## 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

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出國期間:民國 107年4月20日至4月24日

報告日期:民國 107年5月20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)。本次會議內容包羅萬象,突出放射腫瘤學是一個迅速發展的創新學科這一事實,努力發展更好、更準確和更精確的治療,放射腫瘤學的創新不僅對治療的價值產生了積極的影響,而且還可以使用技術(例如自動化,效率)和放射生物學(例如超分割)提供服務於不斷增長的癌患。

關鍵字:放射治療

## 目次

- 一、目的
- 二、 過程
- 三、心得
- 四、 建議事項
- 五、 附錄

### 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 2018 年 4 月 20 日至 4 月 24 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,目的專注於跨學科性和多學科性的社會,輻射腫瘤學家,醫學物理學家,放射生物學家,短程治療師和放射治療師有機會與其他腫瘤學組織進行接觸,共同致力於改善癌症治療。 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)。

本次大會主題爲"創新爲價值和獲取",突出放射腫瘤學是一個迅速發展的 創新學科這一事實,努力發展更好、更準確和更精確的治療,放射腫瘤學的創新 不僅對治療的價值產生了積極的影響,而且還可以使用技術(例如自動化,效率) 和放射生物學(例如超分割)提供服務於不斷增長的癌患。本次會議內容包羅萬 象,例如乳房和毒性、肺部和劑量增加、精確放療期間如何將盆腔惡性腫瘤的毒 性降至最低、免疫放射療法和輻射劑量,時間安排和劑量的關鍵影響、少數轉移 性疾病治療治療、自動計劃、在輻射模式中應用劑量-反應模型:腫瘤控制和副作 用、兒科腫瘤學、顆粒治療、用於放療的新成像方法、放射學放射基因組學、在 2020年設計放射治療臨床試驗部分器官治療,以盡量減少晚期輻射影響、患者參 與,共同決策,以患者爲中心的護理、人口老齡化對放射腫瘤學的影響、放射療 法人力資源方面的挑戰、挽救放射治療、規劃未來的全球放射治療服務、基於價 值的放射治療等。

本次大會依往例特別安排了許多綜合科學計劃提供最先進的講座,座談會, 熱點話題辯論以及一系列教育活動,如會前課程,輪廓研討會,教學講座和多學 科腫瘤委員會。同時提供歐洲最大的放射腫瘤學工業展覽會,這是一次與行業領導者互動的機會,預見放療技術和治療產品的最新發展。

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),共發表二篇本院治療過鼻咽癌研究報告,獲得大會接受。我的論文題目爲「不同治療方式和血漿 EB 病毒定量對第三期鼻咽癌病人之影響」,分析 356 例新診斷第三期鼻咽癌病人治療結果與預後因子,特別著重於不同化放療的影響,將儘快謝成完整論文投稿 SCI 期刊。

此次會議地點在西班牙巴塞隆納,塞隆納爲國際大都市,是西班牙南方最重要的城市,也擁有豐富的藝術文化資產。巴賽隆納曾辦過 1992 年奧運會,有許多列入聯合國評定的人類世界文化遺產的偉大建築,目前每年有許多國際重要的會議或商展選在巴賽隆納舉行,也是西班牙發展國際觀光最重要的城市,替西班牙賺取許多外匯。在開會期間感覺,市民生活水平與道德水準不錯。

#### 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當,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-西班牙巴塞隆納,市容整潔,市民道德水準高,雖然政治上鬧公投獨立,但並未影響醫學學術活動,值得學習;(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 different treatment modality and pretreatment plasma EBV DNA levels in patients with stage III nasopharyngeal carcinoma (NPC).

#### **Materials and Methods:**

This retrospective study collected 356 previously untreated, pathologically-proven NPC patients with stage III disease. The initial definitive treatment consisted of concurrent chemoradiotherapy (CCRT, n=145) or induction chemotherapy plus radiotherapy (IndCT-RT, n=211). Eighty-four of 356 (23.6%) patients also received post-RT adjuvant chemotherapy. The pre-treatment EBV DNA level was measured by the real-time quantitative polymerase chain reaction. We arbitrarily divided patients into a high (> 1000 copies/mL, n=106) or low (< 1000 copies/mL, n=250) viral load subgroup. Subsequent relapse rates and various survival curves were compared between different treatment modality and EBV viral load.

#### **Results:**

Baseline characteristics between CCRT and IndCT-RT were no significant differences except for a higher percentage of N2 disease in the IndCT-RT subgroup (92.4% vs. 80.0%, P=0.0005). Both treatment modality resulted in similar relapse rates (20.0% vs. 17.5%, P=0.5566). The overall survival (OS, P=0.1980), progression-free survival (PFS, P=0.5339), distant metastasis failure-free survival (DMFFS, P=0.8870), and locoregional failure-free survival (LRFFS, P=0.3516) between CCRT and IndCT-RT revealed no statistically significant difference. However, patients with a high viral load experienced a higher relapse rate (33.0% vs. 12.4%, P<0.0001) and worse OS (5-year rate, 79.0% vs. 92.8%, P<0.0001), PFS (73.7% vs. 88.4%, P<0.0001), DMFFS (80.2% vs. 95.0%, P<0.0001), and LRFFS (85.6% vs. 92.6%, P=0.0045) than those with a low viral load.

#### **Conclusion:**

IndCT-RT can reach the same treatment outcome as the current standard CCRT for stage III NPC patients. The pretreatment EBV DNA level identified a subgroup of patients, who presented with a higher viral load and suffered from significantly worse survivals. Strengthen treatment intensity for these subgroup patients deserves to study in future trials.

#### Effects of different treatment and EBV viral load in stage III nasopharyngeal carcinoma patients

EP-1135

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A bineviation: NPC, rasopharyngeal carcinoma; CCRT, concurrent chemoradiotherapy; IndCT, indaction chemotherapy; AdjCT, adjuvant chemotherapy.

#### PURPOSE

To investigate the prognostic impacts of different treatment modality and pre-treatment plasma EBV DNA levels in patients with stage III NPC.

#### MATERIALS AND METHODS

#### Inclusion criteria

- Previously uniteraled, Bx-proven stage III NPC
  Finished combined the moradiotehrapy
  Have pre-Tx pEBV DNA data

#### Initial definitive treatment



74.09	10-14						
CCRT							
Week HT P30 d1-6 P400 d1-4	inn mar mar	im	im	im	S Here cree	im	im

#### Post-RT AdjCT

84/356 patients also received oral legafur-uracil (100 mg legafur + 224 mg uracil) 2# bid for 12 months.

Table 1. Patient characteristics according to treatment modality (n=356)

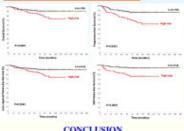
		to street	it medali	ty		
	IndCT+1	RT (n=211)	CCRT (n=145)			_
Characteristics	No	%	No	%		
Age (years)					9,7666	Ī
Median	4	8		6		
25% CI	44	47	43	-48		
Sec					6,8632	
Mak	151	71.6	102	79.3		
<b>Female</b>	60	28.4	43	29.7		
Karnolsky scale					0.3657	
250%	286	27.6	139	95.9		
<80%	5	2.4	6	4.1		
Pathology (WH)	09					
Type I	1	0.5	4	2.5	6.1001	
Type II	149	70.6	106	74.5		
Type III	61	26.9	33	22.8		
T-days floation					0.6203	
TI-2	122	57.5	50	55.2		
B	89	42.2	65	44.8		
N-dawification						
NI-I	16	7.6	29	20.0	0,0005	
N2	198	92.4	116	50.0		

# Survival analysis by different Tx modality - IndC1407 - IndC1400 | 2 - IndC1400 Petro

Table 2. Patient characteristics according to pre-Tx viral load

Charachetico	≥ 1000 coph u/ml (n=106)		< 1000 copies/ml (n=250)		
	Na	%	No	5	
Age (years)	10000		537	10000	0.1964
Median		8	4	15	
95% CI	43-48		44-47		
Sex					0.9325
Make	75	79.8	178	71.2	
Formale	31	29.3	72	28,8	
Karnofsky scale					1,0000
M05	103	67.2	242	96,8	
<80%	3	2.8		3.2	
Pathology (W IIIO)					
Type I	2	LP	3	1.2	0.7271
Type II	78	73.6	179	71.6	
Type III	26	24.5	68	27.2	
T-classification					0.1505
T1-2	54	50.9	146	59.2	
T3	52	49.1	102	40.8	
N-classification					
NP-I	12	11.3	33	13.2	0.6256
N2	94	88,7	217	86.8	

#### Survival analysis by pre-Tx viral load



#### CONCLUSION

IndCT-RT can reach the same treatment outcome as the current standard CCRT for stage III NPC patients. The pretreatment EBV DNA level identified a subgroup of patients, who presented with a higher viral load and suffered from significantly worse survivals. Strengthen treatment intensity for these subgroup patients deserves to study in future trials.







European SocieTy for Radiotherapy & Oncology

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THIS IS TO CERTIFY THAT

Prof. Dr. Lin Jin-Ching

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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.)



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