香 港 醫 務 委 員 會

The Medical Council of Hong Kong

DISCIPLINARY INQUIRY
MEDICAL REGISTRATION ORDINANCE, CAP. 161

Defendant: Dr TSAO Shiu Ying (曹紹應醫生) (Reg. No.: M01298)

Dates of hearing: 23 October 2015 (Day 1), 18 June 2017 (Day 2), 26 July 2017 (Day 3) and 1 August 2017 (Day 4)

Present at the hearing

Council Members/Assessors: Prof. Felice LIEH-MAK, GBS CBE JP (Temporary Chairman)
Miss CHAU Man Ki Mabel, MH
Dr HO Hung Kwong Duncan
Dr HO Pak Leung, JP
Dr HUNG Se Fong, BBS
Dr KWONG Kwok Wai Heston, JP
Mr POON Yiu Kin Samuel

Legal Adviser: Mr Edward SHUM

The Defendant was present. He was not legally represented.

Senior Government Counsel representing the Secretary: Mr Mark CHAN

1. The charge against the Defendant, TSAO Shiu Ying, is:

> "That in the period from March 2006 to May 2006, he, being a registered medical practitioner, disregarded his professional responsibility to his patient late [redacted] ("the Patient") in that he provided suboptimal treatment to the Patient in terms of radiotherapy dose-fractionation as well as chemotherapy dosage, namely, dose and/or timing.
>
> In relation to the facts alleged, he has been guilty of misconduct in a professional respect."

Facts of the case

2. The Defendant was at all material times a registered medical practitioner. His name was at all material times and still is included in the General Register. The name of the Defendant has been included in the Specialist Register under

the specialty of Clinical Oncology since 6 September 2000.

3. According to the medical records obtained from Prince of Wales Hospital ("PWH"), the Patient first consulted the outpatient clinic of its Department of Ear, Nose and Throat ("ENT") on 20 February 2006 complaining of on and off epistaxis for 2 years, hearing loss and neck mass. Subsequent biopsy of the neck mass then showed undifferentiated carcinoma type of nasopharygneal carcinoma ("NPC").

4. According to Madam LEE, the Patient's mother and the Complainant in this case, the Patient was informed of his NPC during the follow up visit at PWH on 4 March 2006. The Patient was told that radiotherapy treatment could be arranged for him on 15 March 2006.

5. In order to receive treatment as soon as possible, the Patient consulted the Defendant, a Specialist in Clinical Oncology in private practice, at St. Teresa's Hospital ("STH") on 6 March 2006. CT scan done at STH later the same day also confirmed the intraluminal mass of large size found in the nasopharygneal lumen represented NPC.

6. Pursuant to the Defendant's prescription, a total course consisting of 13 fractions of radiotherapy and 4 cycles of chemotherapy was given to the Patient at STH. The 13 fractions of radiotherapy was given in 2 phases: Phase 1 of conventional radiotherapy was done by 3-dimensonal conformal technique with 3 fields covering nasopharynx and upper neck and single field to lower neck, a total dose of 30Gy was delivered in 10 fractions over 12 days starting from 10 March 2006. Phase 2 was done by 9 fields step and shoot intensity modulated radiotherapy ("IMRT"), a total dose of 18Gy was delivered in 3 fractions over 8 days ending on 11 April 2006.

7. There is no dispute that the radiotherapy fractionation scheme used by the Defendant was unconventional and could not be considered optimal for curative intent. The equivalent dose to normal fractionation delivered to the Patient was about 57Gy, which was much below the recommended dose of 66 to 70Gy for radical treatment.

8. According to the Defendant, he gave the Patient this prescription because the Patient had no insurance coverage. In view of the imminent blowout of the carotid artery branches supplying the nasopharynx (the "impending carotid blowout"), the Defendant considered it necessary to give the Patient prompt and

effective treatment by chemo-radiotherapy first whilst leaving the rest of the radical treatment for PWH oncologists to handle when the Patient later attended his scheduled appointment.

9. However, in his medical report on the Patient dated 28 March 2006, which the Defendant claimed was given to the Patient for onward transmission to, amongst others, oncologists at PWH, the Defendant merely wrote down:-

"This patient presented with epistaxis which was rather profuse & for this, a course of chemotherapy and Phase I RT (radiotherapy) was delivered on an urgent basis for his advanced NPC. He is expected to cont(inue) with the treatment to fulfill all the requirements of radical Rx (treatment).
Thank you!"

10. There is no dispute that the Patient's first oncology appointment at PWH was on 3 April 2006. According to the medical report prepared by Dr LAM Chor Man of the Department of Radiotherapy/Oncology of PWH and dated 28 July 2009:-

"Mr. FUNG KAM YEE was referred to our unit by Department of Ear, Nose and Throat of Prince of Wales Hospital and attended to our unit on 3 Apr 06 during which time he was already under care of his stage II nasopharyngeal carcinoma at private by Dr SY Tsao.

We were informed that his chemoirradiation was completed in St Teresa's Hospital in Apr 06…"

11. Meanwhile, the Patient continued his chemo-radiotherapy at STH until 11 April 2006. According to the Progress Notes written by the Defendant on his consultation with the Patient, he saw the Patient on 2 occasions in April 2006. However, apart from stating in the Progress Notes on 7 April 2006 that the Patient had one more treatment to complete Phase II RT, there was no mention of referral being made for the Patient to complete the rest of the radical treatment for his NPC at PWH. Nor was there anything in the Progress Notes which suggested that the Patient was required to undergo further treatment after completing Phase II RT.

12. According to the Defendant, he subsequently found out from the radiographers at STH that no one from PWH had approached them for details of the dose fractionation given to the Patient. This raised his suspicion that the Patient had not been given the rest of the radical treatment for his NPC at PWH. He

therefore wrote out another medical report on the Patient and asked the staff of the STH Cancer Centre to send it to the Department of Oncology of PWH.

13. However, in this medical report which was dated 13 June 2006, the Defendant merely wrote down:

"This patient with NPCII was treated by chemoradiotherapy using Cisplatin weekly dose and conv(entional) + IMRT for good loco-regional control.

He completed his treatment by 11 April 2006 and repeat planning CT done 3/52 later showed almost complete response by then already. Physically he is recuperating but has not gone back to work.
Thank you."

14. The Defendant claimed that the word "his" in the first sentence of the second paragraph should read "this". Be that as it may, despite the initial loco-regional response after chemo-radiotherapy at STH, bone scan done at PWH in September 2006 showed that the Patient developed multiple bone metastases. The Patient was also found to have neck node recurrence and lung metastasis later. However, apart from a brief course of zoledronic acid treatment at PWH for his bone metastases, the Patient refused to undergo further chemotherapy or radiotherapy. Eventually, the Patient succumbed to cancer progression and died on 18 May 2008. The Complainant later lodged this complaint against the Defendant with the Medical Council by a letter dated 9 February 2009.

Burden and Standard of Proof

15. We bear in mind that the burden of proof is always on the Legal Officer and the Defendant does not have to prove his innocence. We also bear in mind that the standard of proof for disciplinary proceedings is the preponderance of probability. However, the more serious the act or omission alleged, the more inherently improbable must it be regarded. Therefore, the more inherently improbable it is regarded, the more compelling the evidence is required to prove it on the balance of probabilities.

16. There is no doubt that the allegation made against the Defendant here is a serious one. Indeed, it is always a serious matter to accuse any registered medical practitioner of misconduct in a professional respect. We need to look at all the evidence and to consider and determine the disciplinary charge against him carefully.

Findings of the Council

17. Initially, the Legal Officer's case against the Defendant is that he provided suboptimal treatment to the Patient in terms of radiotherapy dose fractionation as well as chemotherapy dosage, namely, dose and/or timing. However, in view of the opinion of Dr CHUA (who was subsequently engaged to act as the Secretary's expert in this case) that no definite dose-response-outcome relationship could be established for chemotherapy in primary treatment setting for NPC, the Legal Officer had to accept that the chemotherapy dosage given to the Patient was still within an acceptable range.

18. With regard to the radiotherapy dose fractionation scheme used by the Defendant, Dr CHUA opined that it was not only unconventional but also suboptimal for curative intent. Dr CHUA explained that using linear quadratic equation and assuming alpha/beta ratio of 10 for tumor, the equivalent dose to normal fractionation delivered to the Patient was about 57 Gy, which was much below the recommended dose of 66 to 70Gy for radical treatment. Although endoscopy of nasopharynx performed at PWH on 26 June 2006 showed no evidence of residual tumor, Dr CHUA cautioned that this should not be taken as equivalent to the Patient's NPC being put under long term control. This is because although the radiotherapy dose fractionation scheme used by the Defendant was suboptimal, short term complete remission of NPC could still be achieved owing to the inherent high radiosensitivity of undifferentiated carcinoma of nasopharynx.

19. The Defendant admitted that the radiotherapy dose fractionation scheme prescribed by him was suboptimal for radical treatment of the Patient's NPC. However, the Defendant argued that it was his specific aim to control the Patient's life-threatening epistaxis effectively so that the rest of radical treatment for NPC could continue in time at PWH. It was never his intention to take the Patient over to STH for full-fledged management of his NPC. The Defendant further explained to us that in 2006, intensity-modulated radiotherapy ("IMRT") that he had used on the Patient was still a relatively new technique. In order to compensate for the peculiarly low dose rate delivery of IMRT, the Defendant considered it necessary to give a higher dose than conventional per fraction to the Patient at Phase II.

20. We agree with the Defendant that guidelines on management of patients are developed using the best evidence for a defined patient population and they are not intended to be inclusive of all possible patient-related variables that influence treatment decisions. Whilst sometimes clinical judgment may be more important in reaching treatment decisions but deviation from established guidelines has to be justified by good and cogent reasons. We must therefore be vigilant to see whether the reasons given by the Defendant are valid and in accordance with sound medical practice.

21. According to the medical records obtained from STH, the Patient's vital signs on the day when he first consulted the Defendant were normal with Blood Pressure 130/85, Pulse 78, and Hb 11.6. There was no record of blood transfusion at any time during the radiotherapy treatment. Hb remained stable throughout at 11.2-11.4. Although the Defendant repeatedly stressed that the Patient had one of the most prolonged and continuous epistaxis due to NPC lasting up to 2 years, he was constrained to accept that actual carotid blowout would be rare for NPC patients with epistaxis. Throughout his lengthy medical career, the Defendant saw only about 5 such patients over the past 50 years.

22. It is clear to us from studying the objective data in the medical records kept by STH that the Patient was never on the verge of a life-threatening carotid blowout when he first consulted the Defendant. Report for CT scanning examination of the Patient's nasopharynx on 6 March 2006 did not reveal anything suspicious of erosion of carotid branch of the artery. There was no mention of impending carotid blowout in any of the Progress Notes written by the Defendant. Equally, there was nothing to indicate an impending carotid blowout in any of the medical reports obtained from PWH. It is implausible that ENT doctors at PWH would be so complacent in not arranging for confirmatory tests if there was any indication of impending carotid blowout. In our view, the Defendant was making this up as an excuse for the suboptimal treatment that he gave to the Patient.

23. Our attention was drawn to a study by the Department of Clinical Oncology of Tuen Mun Hospital during the period from 1992 to 2000, which the Defendant claimed, supported his use of as high as 6Gy per fraction at Phase II of the radiotherapy. However, this study was about the efficacy of brachytherapy for persistent T2B NPC and not conventional radiotherapy or IMRT for NPC at all. We do not agree with the Defendant that insofar as dose is concerned, brachytherapy would be the same as IMRT.

24. The Defendant also referred us to a study by the Queen Mary Hospital during the period of 1986 and 1987, which he claimed, supported his use of high dose fractionation. Whilst the results of this study demonstrated that use of a higher dose is required for larger tumors and more resistant tumors, it also warned against the increased risk of damage to the normal tissue. Indeed, this study rightly emphasized in our view that the chosen dose for radiotherapy of NPC has to maximize the therapeutic ratio, so that the probability of tumor control is high and there is minimal chance of the damage to normal tissue.

25. The Defendant claimed that ever since the mid-1980s, his favourite rapid RT fraction had been 6Gy per fraction, 1 to 2 fractions per week; and he found this prescription to be very effective for NPC at risk of carotid blowout. Whatever oncologists might have done in the past is something that we should take into account but it is not conclusive. We must always be vigilant to see whether the reasons behind such a practice are still valid in the light of advance in medical knowledge.

26. We agree with Dr CHUA that the radiotherapy dose fractionation prescribed by the Defendant would expose the Patient to a higher risk of damage to the normal tissues of his nasopharynx. By using fraction as high as 3 to 6Gy, this would indeed increase rather than reduce the risk of a blowout of an arterial branch. Moreover, we agree with Dr CHUA that by failing to reach the recommended dose of 66 to 70Gy for radical treatment, the long term control of the Patient's NPC would be compromised.

27. For these reasons, we are satisfied on the evidence that the Defendant had disregarded his professional responsibility to the Patient in that he provided suboptimal treatment to the Patient in terms of radiotherapy dose fractionation. In our view, the Defendant's conduct had clearly fallen below the standards expected of registered medical practitioners in his field. Accordingly, we also find him guilty of professional misconduct.

Sentencing

28. We bear in mind that we are not here to punish the Defendant for what he had done to the Patient. Rather, our task is to protect the public from persons who are unfit to practise medicine and to maintain public confidence in our medical profession.

29. The Defendant sought to justify the suboptimal treatment that he gave to the

Patient on the false excuse that this was done for the specific aim of effectively controlling the Patient's life-threatening epistaxis so that the rest of the radical treatment could continue in time at PWH. Despite our finding against him on this crucial point, in mitigation the Defendant still tried to exonerate himself by saying the carotid artery was not easy to see.

30. In our view, any registered medical practitioner and even more so if he is a specialist must ensure that his clinical decision to treat the patient with any form of therapy is evidence based. As a corollary, any clinical decision to depart from established treatment guidelines must be capable of withstanding logical analysis. In particular in cases involving, like the present case, the weighing of risks against benefits, we must be vigilant to see whether the reasons given for putting a patient at risk are valid ones.

31. The gravamen of the Defendant's misconduct lies in putting the Patient at risk in not completing the radical treatment of his NPC and exposing him to a higher risk of damage to the normal tissues of his nasopharynx. We need to emphasize that we are not holding the Defendant responsible for subsequent development of distant metastases and death of the Patient. But then again, we found nothing in the course of this inquiry which indicated that the Defendant had any insight into his wrongdoings. We are astonished to hear that when being asked by the Legal Officer, the Defendant boldly replied that if given another chance he would treat the Patient in exactly the same way.

32. Taking into consideration the nature and gravity of the disciplinary charge and what we have heard in mitigation, we order that the Defendant's name be removed from the General Register for a period of 6 months.

33. We have to consider whether to impose an immediate implementation order under section 21(1)(iva) of the Medical Registration Ordinance ("MRO"). In the course of this inquiry, the Defendant was adamant that what he had done was proper and correct. This only showed his lack of insight into his wrongdoings remained unchanged.

34. Unless and until the Defendant has fully appreciated his shortcomings and make a real effort to improve himself, beside undergoing Continuing Medical Education which is mandatory for all specialists in any event, we have grave concern about the safety of the public if the Defendant is allowed to continue with his medical practice.

35. Therefore, we further order pursuant to section 21(1)(iva) of the MRO that the above removal order shall take effect upon publication in the Gazette.

Remarks

36. The Defendant's name is also included in the Specialist Register under the specialty of Clinical Oncology. We shall leave it to the Education and Accreditation Committee to consider whether any action needs to be done in respect of his specialist registration.

Prof. Felice LIEH-MAK, GBS CBE JP
Temporary Chairman, Medical Council