The Medical Council of Hong Kong

DISCIPLINARY INQUIRY MEDICAL REGISTRATION ORDINANCE, CAP. 161

Defendant: Dr LEUNG Kam Suet Linda (梁錦雪醫生) (Reg. no M13418) Date of hearing: 10 October 2012

1. The charge alleged against the Defendant, Dr LEUNG Kam Suet Linda, is that:-

"On 15 June 2007 she, being a registered medical practitioner, disregarded her professional responsibility to her patient ("the Patient"), the deceased, in that she wrongly gave an intrathecal injection of Vincristine into the Patient's spine which resulted in the Patient's death.

In relation to the facts alleged, she has been guilty of misconduct in a professional respect."

Facts of the case

- 2. The Patient suffered from acute lymphoblastic leukaemia. She received chemotherapy treatment in a public hospital. On 15 June 2007, the treating doctor prescribed two drugs to be administered to the Patient, namely vincristine and cytarabine, the former by intravenous injection and the latter by intrathecal injection.
- 3. The Defendant was a medical oncology trainee at the hospital. In other words, she was a registered medical practitioner undergoing specialist training in the specialty of Medical Oncology. She was assigned to administer the drugs to the Patient.
- 4. The Defendant administered the two drugs with the assistance of an enrolled nurse. Despite the instruction in the prescription form that vincristine was to be administered by "*slow iv push*" meaning intravenous injection, and the

warnings "*For IV ONLY*" on the label affixed to the packaging and on the label affixed to the syringe containing vincristine, the Defendant administered vincristine intrathecally into the spinal canal of the Patient.

- 5. On 16 June 2007, the Patient attended the Accident and Emergency Department of the same hospital, because of fever, neck pain, back pain, headache, pain and weakness of lower limbs. The initial diagnosis was infective meningitis. Her condition deteriorated after admission.
- 6. On 18 June 2007, the Defendant learned about the Patient's symptoms suggestive of meningitis, and realized that she might have administered vincristine through the wrong route. She reported this possibility to the Department of Clinical Oncology. Upon checking the medication records it was confirmed that vincristine was administered intrathecally to the Patient. As there was no effective therapy to reverse the effects of intrathecal administration of vincristine, the Patient died on 7 July 2007. The autopsy report showed that the Patient died of diffuse vincristine neuropathy.

Findings of Council

- 7. The facts are admitted by the Defendant. Nevertheless, it remains our responsibility to determine whether the Defendant's conduct constitutes professional misconduct.
- 8. Vincristine is neurotoxic and must only be given via the intravenous route. Intrathecal administration of vincristine into the spinal canal is nearly always fatal. The few patients who have survived have had severe and permanent neurological damage. Overseas cases of inadvertent intrathecal administration of vincristine have been reported repeatedly as early as 1968, and 55 such cases have been reported up to July 2007. Risk-reduction strategies have been promulgated worldwide to prevent such inadvertent injection.
- 9. There are only a few drugs which can be administered intrathecally. Given the prominent reports of fatalities resulting from inadvertent intrathecal administration of vincristine, a registered medical practitioner with training in Medical Oncology should be well aware of the fact that the drug cannot be administered intrathecally.

- 10. There was clear instruction in the prescription form and clear warning on the drug labels that vincristine can only be administered intravenously. The fact that the drug was contained in a syringe for intravenous injection should also have alerted the Defendant that the drug should not be administered intrathecally.
- 11. At the relevant time, the Hospital Authority had issued a guideline on drug administration procedures and practice. Under the guideline of "3 Checks and 5 Rights", doctors are required to conduct a number of checks to ensure that the right drug at the right dose is given via the right route at the right time to the right patient. If the Defendant had followed the guideline, there was no reason that she would have overlooked the various instructions and warnings that the drug could only be administered intravenously.
- 12. For this reason alone, the Defendant's conduct clearly fell below the standard expected amongst registered medical practitioners and constituted professional misconduct.
- 13. Furthermore, in July 2007 the Defendant was already in the final year of her specialist training in Medical Oncology and was qualified to sit the exit examination for becoming a specialist in Medical Oncology. In addition, she had given intrathecal administration of drugs for about 20 times prior to the present case. She should have been well aware that vincristine cannot be administered intrathecally.
- 14. The special investigation panel of the Hospital Authority investigating into the present incident set out in its report in August 2007 the Defendant's medical training as follows:-

"The Resident Doctor was qualified as a medical practitioner in UK in 2000. She underwent internal medicine training in UK as a Senior House Officer and obtained the membership of the UK College of Physicians (MRCP) qualification in 2003. She was a Senior House Officer in a major cancer hospital (The Royal Marsden Hospital, London, UK) in 2003-2004 specializing in Medical Oncology. She joined [the Department of Clinical Oncology of the hospital in the present case] as a locum medical officer in April 2004 and as a Resident in 2005. She became a member of the HK College of Physicians in 2004. She passed two annual assessments of Higher Physician Training in Medical Oncology in 2005 and 2006 and is due for Exit Examination in 2007 to become a Fellow of the HK College of Physicians under the specialty of Medical Oncology. She has performed about 20 [intrathecal] chemotherapy procedures."

- 15. Given her training and experience in oncology treatment, the Defendant should have readily recognized that vincristine could only be administered intravenously and not intrathecally. The only reasonable inference we can draw from her administering the drug via the wrong route in the circumstances is that she was not at all focused when performing such a high-risk treatment procedure. This was a blatant neglect of her professional responsibility to the Patient.
- 16. In conclusion, we are satisfied that the Defendant's conduct was seriously below the standard expected amongst registered medical practitioners and constituted professional misconduct. We find her guilty as charged.

Sentencing

- 17. The Defendant has a clear record.
- 18. In accordance with our published policy, we shall give the Defendant credit in sentencing for her cooperation during preliminary investigation and in this inquiry. However, as the evidence is overwhelming and there is no realistic prospect of disputing the charge, the credit given is necessarily lesser than the credit to be given in other cases.
- 19. We bear in mind that the purpose of a disciplinary order is not to punish the Defendant, but to protect the public from persons who are unfit to practise medicine because of incompetence or other reasons, and to maintain public confidence in the medical profession by upholding the reputation of the profession. The personal circumstances of the Defendant and the hardship she might have suffered because of the publicity of the case, although relevant, are not our primary consideration.

- 20. We must emphasize that doctors carry a heavy responsibility of preserving patients' lives and maintaining their health. It is an onerous responsibility, as even a simple mistake or a moment of inattention in medical treatment can have serious and sometimes fatal consequences.
- 21. We accept that the dispensing system at the material time can be further improved to better alert doctors of the proper routes of administration of drugs. However, we do not accept that the dispensing system or the assisting nurse in any way contributed to the Defendant's misconduct. It is a doctor's professional responsibility to verify the proper route of administration of a drug before proceeding to administer it.
- 22. The Coroner rightly pointed out that while there is always room for improvement of the system, there is no perfect system and no system is better than the medical staff always reminding themselves that they are dealing with lives. Dealing with patients' lives is a very important job, hence doctors should always be learned, prepared, focused and cautious in their jobs, whether the jobs are big or small, and they should avoid being overconfident or complacent.
- 23. There were clear instruction and warnings as to the route of administration. Any reasonably competent doctor exercising reasonable care should have administered the drug via the proper route. If the Defendant did not even follow such clear and simple instruction, we are very concerned what she will do when faced with more complicated instructions.
- 24. This is a very serious case, as the Defendant's misconduct directly caused the Patient's death. In the absence of any effective therapy to reverse the effects of intrathecal administration of vincristine, once the misconduct was committed there was no return from the road to death or severe and permanent injury.
- 25. Having regard to the gravity of the case, we consider that an order of removal from the General Register for 30 months is appropriate. Giving credit for the mitigating factors, we order that the Defendant's name be removed from the General Register for a period of 24 months.

26. We have considered whether the order can be suspended, and conclude that it cannot be suspended.

Other comments

- 27. We have a number of comments to make. However, we must emphasize from the outset that we have not been influenced by these matters in deciding on judgment and sentence.
- 28. Although this serious medical incident took place in a public hospital under the management of the Hospital Authority, this case was brought to the Council's attention by an anonymous complainant 3 years after the incident on the basis of a press report of the death inquest. The complainant alleged that this Council had not fairly handled this case of professional misconduct, and urged us not to adopt the attitude of "doctors protecting doctors" thus losing the public's confidence.
- 29. In recent years this Council has repeatedly urged the Hospital Authority to refer suspected cases of doctors' professional misconduct which take place in public hospitals to this Council, so that appropriate disciplinary proceedings can be initiated. Nevertheless, judging from the number of medical incidents reported in the press and the disproportionately small number of cases referred to this Council by the Hospital Authority, we are of the view that there is much room for improvement on this matter.
- 30. We must emphasize that all doctors, irrespective of whether they are in public or private practice, are under disciplinary regulation by this Council.
- 31. The Defendant is a specialist in Medical Oncology. While it is for the Education and Accreditation Committee to consider whether any action should be taken in respect of the Defendant's specialist registration, we should point out that the matter is directly within the area of the Defendant's speciality. However, it may be relevant for the Committee to note that the misconduct was committed before the Defendant's name was included in the Specialist Register.

Prof. Felice Lieh-Mak, GBS, CBE, JP Temporary Chairman, Medical Council