香港醫務委員會

The Medical Council of Hong Kong

DISCIPLINARY INQUIRY
MEDICAL REGISTRATION ORDINANCE, CAP. 161

Defendant: Dr CHAN Shun Hung Andrew (陳舜鴻醫生) (Reg. No.: M03699)

Date of hearing: 4 June 2026 (Thursday)

Present at the hearing

Council Members/Assessors: Dr HO Pak-leung, JP
(Chairperson of the Inquiry Panel)
Dr LING Siu-chi, Tony
Dr MAK Siu-ming
Mr LAM Chi-yau
Ms Karen CHEUNG

Legal Adviser: Mr Edward SHUM

Defence Solicitor representing the Defendant: Miss Sally WONG of Messrs. Johnson Stokes & Master

Legal Officer representing the Secretary: Mr CHAN Yip Hei, Outside Counsel, as instructed by Department of Justice

The Defendant is not present

The Amended Charges

1. The amended charges against the Defendant, Dr CHAN Shun Hung Andrew, are:

> *"The particulars of the complaint are that on or about 9 September 2013, he, being a registered medical practitioner, disregarded his professional responsibility to his patient* [redacted] *("the Patient"), deceased, in that he:*

(a) *failed to make proper and/or adequate preparation, including intra-arterial pressure monitoring, before administering general anaesthesia to the Patient;*

(b) *failed to timely and/or properly monitor the Patient's condition (including but not limited to intra-arterial pressure, haemoglobin, blood gas pH, calcium) during the right hepatectomy under general anaesthesia ("the Operation"); and/or*

(c) *failed to timely administer blood products and/or tranexamic acid to the Patient during the Operation and when situation so warranted.*

In relation to the facts alleged, either singularly or cumulatively, he has been guilty of misconduct in a professional respect."

Facts of the case

2. The name of the Defendant has been included in the General Register from 24 August 1979 to the present. His name has been included in the Specialist Register under the Specialty of Anaesthesiology since 4 March 1998.

3. Briefly stated, the Patient, a Malaysian passport holder then living in Chinese Mainland, was admitted to a hospital in Guangzhou on 12 August 2013 after feeling unwell with abdominal pain. Operation for Liver Transarterial Embolization was performed. However, persistent low blood pressure was noted after the operation, raising suspicion of persistent bleeding. Emergency laparotomy of right liver with ligation of right hepatic artery was performed. And the Patient was found to have a ruptured right liver tumour of uncertain nature with bleeding in the peritoneal cavity.

4. On 18 August 2013, the Patient was transferred from Guangzhou to the Hong Kong Sanatorium & Hospital ("HKS&H") and was admitted to the Intensive Care Unit ("ICU") for further management.

5. According to the medical records kept by HKS&H, the Patient had a persistent low grade fever upon admission but vital signs were stable with hypertension. Initial blood test showed marked anaemia (haemoglobin, 7.3 g/dL) that

required repeated blood transfusion; raised white blood cell count (22.7 x 10e9/L); grossly deranged liver function with raised total bilirubin (155 umol/L); and raised liver enzymes (AST, 268 U/L; ALT 536 U/L). Also prolonged prothrombin time (INR, 3.12) and activated partial thromboplastin time (34 sec) were noted, indicating significant liver impairment.

6. On 18 August 2013, CT Scan of the Patient's abdomen was done and revealed, amongst others, that the posterior segments of the Patient's right liver was poorly enhanced with gas lucencies, raising suspicion of postoperative changes and/or infarcted liver. Also two large hyperdense subcapsular haematoma were found at the posterosuperior (14.0 x 4.5 x 9.4cm) and posteroinferior (14.8 x 5.1 x 9.1cm) aspects of the right lobe of liver.

7. On 20 August 2013, the Patient was transferred from the ICU to the general ward of HKS&H after his general condition had stabilized.

8. On 24 August 2013, CT Scan of the Patient's abdomen was repeated with similar results to those revealed in the previous CT Scan on 18 August 2013.

9. On 26 August 2013, FibroScan test revealed "*Severe liver fibrosis Compatible with liver cirrhosis.*"

10. On 27 August 2013, the Patient underwent a limited whole body PET CT Scan and revealed, amongst others, that:-

"*1. Heterogeneous lesion in right lobe of liver, suggestive of hematoma. No significant interval change as compared with previous contrast CT dated 24 August 2013.*
2. No obvious lymphadenopathy is seen.
3. Collapse and consolidation in right lower lobe. Mild right pleural effusion. Mild atelectasis in left lung base.
4. No obvious distant metastasis is seen."

11. Despite vigorous conservative treatment, the Patient still had recurrent fever. Eventually, operation for Completion [of] Right Hepatectomy (the "Operation") under general anaesthesia ("GA") at HKS&H was scheduled on 9 September 2013 with the Defendant as anaesthesiologist.

12. Clinical laboratory tests on 7 and 8 September 2013 then showed haemoglobin (10.3 g/dL); white blood cell count (9.42 x 10e9/L); total bilirubin (14.5 umol/L); liver enzymes (AST, 114 U/L; ALT, 189 U/L); prothrombin time (INR, 1.10) and activated partial thromboplastin time (32 sec).

13. The Operation, which began at 13:45 hours on 9 September 2013, turned out to be difficult because of dense adhesions from previous operation in Guangzhou and inflammation.

14. It was noted from reading the Operation Record kept by HKS&H that:-

"***Operative findings***:
Dense adhesions around hepatoduodenal ligament with superior border of duodenum tightly adherent.
Gallbladder remnant noted with thickened fibrotic wall, difficult definition of anatomy which was distorted and shift to right side.
Inferior edge of right hepatic lobe stuck to hepatic flexure of colon probably related to the application of hemostatic material used in last exploration.
Rigid posterior segment appears necrotic with fresh blood clots inside.
Dense adhesions noted at posterior abdominal wall, and lateral side of IVC (Inferior Vena Cava)."

15. During the Operation, there was profuse oozing from the hepatic veins as well as from the raw liver surface. According to the Statement submitted by the Defendant to the Preliminary Investigation Committee ("PIC") dated 8 October 2024, in order to manage the Patient's bleeding, the Operation was stopped several times to reduce the rate of bleeding and to allow for the volume replacement to catch up.

16. It was noted from reading the Operation Record kept by HKS&H that:-

"***Operative procedure***:
Previous bilateral subcostal incision with sternal extension.

Anatomy defined by taking down falciform ligament and mobilization of inferior edge from surrounding tissue.

Hematoma evacuated by opening the liver capsule to allow assessment of posterior segment from within. As extent of necrosis is wide, simple debridement was considered unfavorable as recurrent bleeding and sepsis are highly likely. Completion right hepatectomy as discussed with patient and family before surgery was therefore decided.

Completion total cholecystectomy do[ne] with great difficulty. [C]onfluent of portal vein identified but extrahepatic ligation of portal vein, and right hepatic artery was impossible because of dense adhesions with risk of inadvertent injury and misdiagnosis.

Parencymal transection done using CUSA (Cavitron Ultrasonic Surgical Aspirator) under intermittent partial Pringle man[e]uver and clamping of he[pa]toduoenal ligament incomplete."

17. It was also noted from reading the Operation Record kept by HKS&H that:-

"*Tissue was unhealthy with marked oozing. Right anterior and posterior portal and bi[l]iary pedicle isolated and divided. All bile leak secured. Further transection met with bleeding. Completion of operation using finger fracture technique. Multiple bleeders from right hepatic vein and anterior surface of IVC...*"

18. Unfortunately, the Patient developed cardiac arrest while performing hemostasis. The Patient was resuscitated and transferred to the ICU for further resuscitation. Eventually, the Patient died at around 23:18 hours on 9 September 2013 due to massive bleeding (estimated at 10,800 ml).

19. The Patient's wife subsequently lodged this complaint against the Defendant with the Secretary of the Medical Council (the "Council") in April 2020.

Burden and Standard of Proof

20. We bear in mind that the burden of proof is always on the Secretary 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.

21. There is no doubt that the allegations against the Defendant here are serious ones. Indeed, it is always a serious matter to accuse a registered medical practitioner of misconduct in a professional respect. Therefore, we need to

look at all the evidence and to consider and determine each of the disciplinary charges against him separately and carefully.

Findings of the Inquiry Panel

22. The Defendant admits the factual particulars of the disciplinary charges against him. At the beginning of this inquiry, a Statement of Agreed Facts was submitted for our consideration. We note in particular from the Statement of Agreed Facts that:-

> "*7. Vascular access at the beginning of the Operation was a peripheral 18G intravenous cannula and a right subclavin double-lumen (16G each lumen) central venous catheter (i.e. three channels in total). During the Operation, an additional 16G central venous catheter was inserted into the right internal jugular vein (i.e. the fourth channel).*
>
> *8. Before administering general anaesthesia to the Patient, Dr. Chan did not arrange intra-arterial pressure monitoring. Monitors of electrocardiogram, non-invasive blood pressure cuff, and SpO2 monitoring were applied.*
>
> *9. Throughout the Operation, Dr. Chan continuously monitored the Patient's physiological parameters, including his blood pressure, heart rate, SpO2, end-tidal CO2, blood loss, and urine output.*
>
> *10. However, Dr. Chan did not timely and/or properly monitor the Patient's intra-arterial pressure, haemoglobin, blood gas pH and calcium during the Operation.*
>
> *11. While there were ongoing volume replacement and administration of blood products by Dr. Chan, he did not timely administer blood products and/or tranexamic acid to the Patient during the Operation and when the situation so warranted.*"

23. It remains for us to consider and determine on the evidence whether the Defendant had by his conduct in this case fallen below the standards expected of registered medical practitioners in Hong Kong.

24. In view of the Patient's medical history of significant liver impairment; abnormal liver conditions of cirrhosis, necrosis and infection with generalized sepsis; and repeated CT scan results, raising suspicion of infarcted liver, it was reasonable to expect significant bleeding would occur during the Operation on 9 September 2013. We also note from the Type and Screen Result on 7 September 2013 that the Patient's blood was antibody screen positive, suggesting future transfusion requires "*full crossmatch compatible random donor red cell units*."

25. It is the unchallenged evidence of the Secretary's expert witness, Dr MAINLAND, in her report dated 7 March 2023, and we accept, that:-

> "*4.2.1... Liver resection can... involve large volume blood loss (>10 litres). Patients with liver dysfunction are at increased risk of coagulopathy and bleeding so particularly for such a patient, preparation for intraoperative blood loss is vital.*
>
> ...
>
> *5.1.2* [redacted] *was at higher risk of bleeding for liver surgery on 9 September 2013. This is because he had cirrhosis and deranged liver function; infarcted and necrotic liver; continued to be septic from infection at the liver site and he recently had liver surgery.*
>
> ...
>
> *6.3 It was predictable that significant bleeding would occur during surgery on 9 September 2013 for* [redacted] *for complet[e] right hepatectomy. Preparation for anaesthesia should have included provision for this eventuality.*
>
> *6.4 This would have included intraarterial pressure monitoring; insertion of at least one larger bore intravenous cannula; confirmation of availability of a rapid infusion device.*"

26. There is no doubt in our view that the Patient was at increased risk of significant bleeding during the Operation on 9 September 2013. It was therefore essential for the Defendant to make proper and/or adequate preparation for this eventuality before administering GA to the Patient.

27. As Dr MAINLAND further explained in her supplemental report dated 16 March 2025, whose evidence is unchallenged by the Defendant and we accept, that:-

"*5.1.1 This was not a 'normal' liver resection; the anatomy of the liver and the surrounding tissues was very abnormal and there had been previous surgery.*

5.1.2 It is not reasonable to compare 'usual liver resection cases' to the surgery for [redacted] *for example the 'usual blood loss' and maximum transfusion of two units.*

5.1.3 The result of the abnormal liver conditions, that is cirrhosis, necrosis and infection with generalized sepsis, is that there was derangement of liver function which would also affect surgery and anaesthesia.

5.1.4 These include derangement of acid-base; coagulopathy, including consumpti[on] from underlying sepsis; anaemia from metabolic changes in addition to any ongoing bleeding and, effects on fluid balance.

5.1.5 These conditions increased the likelihood of 'medical bleeding' or loss of blood components in addition to loss of blood components during bleeding."

28. In failing to make proper and/or adequate preparation, including intra-arterial pressure monitoring, before administrating GA to the Patient, the Defendant had in our view by his conduct in this case fallen below the standards expected of registered medical practitioners in Hong Kong. Accordingly, we find the Defendant guilty of misconduct in a professional respect as per the amended disciplinary charge (a).

29. It is also the unchallenged evidence of Dr MAINLAND in her report dated 7 March 2023, and we accept, that:-

"*4.2.5Attention to other patient conditions that cause or worsen coagulopathy include monitoring and treatment to prevent or correct acidosis, hypothermia and hypocalcaemia.*

...

6.5 Management of bleeding should have included earlier and regular measurement of haemoglobin and coagulation as well as earlier administration of blood and blood products and tranexamic acid.

6.6 Monitoring and management of other patient factors such as ... blood gas pH and calcium would have been useful to support coagulation."

30. And we agree with Dr MAINLAND's further explanation in her supplemental report dated 16 March 2025, which is unchallenged by the Defendant, that:-

"*5.6.1 Haemodilution is an appropriate approach to management of such a case of liver resection. However, there are limitations as* [redacted]*'s haemoglobin was low... before surgery and he had required top up transfusions to maintain this. Therefore, he was at greater risk of a lower haemoglobin earlier in the process of haemodilution. Earlier measurement of his haemoglobin and coagulation status would have better guided the timing of transfusion of blood and blood products.*"

31. In failing to timely and/or properly monitor the Patient's condition (including but not limited to intra-arterial pressure, haemoglobin, blood gas pH, calcium) during the Operation, the Defendant had in our view by his conduct in this case fallen below the standards expected of registered medical practitioners in Hong Kong. Accordingly, we also find the Defendant guilty of misconduct in a professional respect as per the amended disciplinary charge (b).

32. According to the Defendant's Statement to the PIC dated 8 October 2024:-

"*26. At around 18:00, the estimated blood loss was around 2,300ml, i.e. the upper limit of the Patient's allowable blood loss... 2 units of fully cross-matched PRC (packed red cells) prepared pre-operatively were... given to the Patient at 18:40 and 18:54 respectively. Additionally, 4 more units of PRC were ordered at 18:25...*

27. At around 19:30, the estimated blood loss was around 5,000ml... 2 more units of PRC were given to the Patient at 19:35 and 19:37...

28. By then, the four units of fully cross-matched PRC prepared before the Operation had all been transfused to the Patient and we were waiting for the PRC ordered at 18:25 to arrive.

...

31. Unfortunately, despite best efforts, the bleeding could not be controlled and the estimated blood loss by 20:40 was about 9,000 ml. The 4 units

of PRC ordered at 18:25 were transfused to the Patient at 20:39, 20:42, 20:50 and 21:12 immediately as they arrived...

32. At around 20:55, the Patient's blood pressure suddenly became unrecordable, with minimum cardiac output despite vigorous transfusion therapy...

33. Despite the limitation on the availability of fully cross-matched PRC, I tried my best to maintain the Patient's haemodynamic stability by transfusing other blood products, colloids and fluids quickly to match the blood loss..."

33. It is however the unchallenged evidence of Dr MAINLAND in her report dated 7 March 2023, and we accept, that:-

"*5.2.3 I agree that blood loss was greater than anticipated. I would expect an anaesthetist to have measured* [redacted]*'s haemoglobin earlier in the operation.*

5.2.3.1 ...knowing that [redacted]*'s starting haemoglobin was 10.2 and the estimated cumulative blood loss,... red blood cell transfusion should have started earlier.*

...

6.5 Management of bleeding should have included... earlier administration of... blood products and tranexamic acid."

34. Indeed, the Defendant also accepted that during the Operation, blood products and/or tranexamic acid should have been given to the Patient earlier than he did.

35. In failing to timely administer blood products and/or tranexamic acid to the Patient during the Operation and when situation so warranted, the Defendant had by his conduct in this case fallen below the standards expected of registered medical practitioners in Hong Kong. Accordingly, we find the Defendant guilty of misconduct in a professional respect as per the amended disciplinary charge (c).

Sentencing

36. The Defendant has a clear disciplinary record.

37. In line with published policy, we shall give the Defendant credit in sentencing for his admission and cooperation before us today.

38. We bear in mind that the primary purpose of a disciplinary order is not to punish the Defendant but to protect the public from persons who are unfit to practise medicine and to maintain the public confidence in the medical profession by upholding its high standards and good reputation.

39. In our view, the gravamen of the Defendant's misconducts in this case lay in his failure to pay sufficient heed to the increased likelihood of significant bleeding in view of the anaesthetic considerations for the Operation, which have quoted at length in paragraph 25 above from the supplemental report of Dr MAINLAND.

40. We appreciate that the Defendant has tremendous support from his professional colleagues.

41. We are told in mitigation that the Defendant has reflected on clinical practice. Now he would always ensure sufficient supply of crossmatched blood for patients who are antibody screen positive; and arrange for intra-arterial pressure monitoring whenever massive bleeding is anticipated.

42. Taking into consideration the nature and gravity of the disciplinary charges for which we have found the Defendant guilty and what we have read and heard in mitigation, we shall make a global order in respect of the amended disciplinary charges (a), (b) and (c) that the name of the Defendant be removed from the General Register for a period of 6 months. We further order that the operation of our removal order be suspended for a period of 24 months.

Remark

43. The name of Defendant is included in the Specialist Register under the Specialty of Anaesthesiology. It is for the Education and Accreditation Committee to consider whether any action should be taken in respect of his specialist registration.

Dr HO Pak-leung, JP
Chairperson of the Inquiry Panel
The Medical Council of Hong Kong