

MEDICAL REGISTRATION ORDINANCE (Chapter 161)

ORDER MADE BY THE INQUIRY PANEL
OF THE MEDICAL COUNCIL OF HONG KONG
DR LIN WENHUA (REGISTRATION NO.: M17921)

It is hereby notified that after due inquiry held on 24 August 2023 in accordance with section 21 of the Medical Registration Ordinance, Chapter 161 of the Laws of Hong Kong, the Inquiry Panel of the Medical Council of Hong Kong found Dr LIN Wenhua (Registration No.: M17921) guilty of the following disciplinary charges:—

“That on 22 and 23 November 2017, she, being a registered medical practitioner, disregarded her professional responsibility to her patient (“the Patient”), deceased, in that she:—

- (a) failed to order and/or arrange the following when the circumstances so warranted:—
 - (i) urgent computed tomography (CT) scan; and/or
 - (ii) emergency laparotomy;
- (b) failed to timely inform her senior doctor for decision making; and/or
- (c) failed to timely inform the Patient’s family members about the condition of the Patient and/or the plan of action.

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

Briefly stated, the Patient, then 80 years old, attended the Accident & Emergency Department (“AED”) of the Yan Chai Hospital (“YCH”) at around 16:58 hours on 22 November 2017. His chief complaint at triage assessment was “*vomiting undigested food once and... diarrhoea (with soft stool x 3 times)*”.

According to the medical records obtained from YCH, the Patient’s chief complaint to the AED doctor was “*epigastric pain*”. Abdominal tenderness was noted upon physical examination. Chest and abdominal x-rays however did not show any free intra-abdominal gas shadows or dilated bowel loops; and lung fields were unremarkable. ECG also revealed no abnormality. The Patient was given Tramadol 50mg by intravenous injection. Blood tests for CBC (complete blood counts); RFT (renal function test); LFT (liver function test); and Trop I (troponin test) were ordered. And the Patient was later transferred to the surgical ward for further management.

The Patient arrived at the surgical ward later in the evening and was seen by Dr LIN at 18:27 hours. According to Dr LIN’s statement to the Preliminary Investigation Committee (“PIC”) of the Council dated 31 May 2019 (“PIC Statement”):—

“...Upon attending [the Patient] on bedside, he complained of epigastric distention and pain for one day, which did not radiate to other places. He reported having vomited undigested food for three times and then around 50ml coffee ground vomitus once. He had bowel opening of normal stool thrice on that day but had neither per rectal bleeding nor tarry stool. He had no chest pain, shortness of breath and no fever. There were no urinary symptoms. He denied recent use of Aspirin or other nonsteroidal anti-inflammatory drugs.

Upon physical examination, [she] found [the Patient] was conscious and conversant. His blood pressure was around 164/74 mmHg and his pulse rate was around 78 beats per minute. He was afebrile with a body temperature of 36.6°C. He had no signs of pallor or jaundice. [She] examined [the Patient’s] abdomen and found it to be soft. There was mild tenderness over the epigastric area, no guarding and no rebound tenderness. No hernia or abdominal mass was felt. [She] also found no skin discoloration. Per rectal examination revealed an empty rectum. [She] had reviewed the electrocardiogram taken earlier at the AED, which showed sinus rhythm with heart rate of 80 beats per minute and no ST segment elevation. [She] also considered [the Patient’s] chest x-ray, which showed bilateral lower zone haziness and no free gas under the diaphragm; abdominal X-ray showed no dilated bowel loops.

[Her] impression of [the Patient’s] condition at that juncture was generally stable save for mild high blood pressure, abdominal pain and one time of small amount of coffee ground vomiting with a working diagnosis of suspected upper gastrointestinal bleeding, possibly due to gastritis or

gastric ulcer. [She] ordered [the Patient] to be kept nil by mouth and to be provided with intravenous fluid. Due to [the Patient's] old age and to check for signs of internal bleeding, [she] ordered him to be closely observed every one hour for four times and then every four hours (when stab[i]lised). Electrocardiogram and urine multistix were also ordered. [She] ordered blood investigations including international normalized ratio, venous blood gas, random glucose, calcium and phosphate in addition to those tests already arranged at the AED and were pending.

To manage [the Patient's] pain, and having noted that Tramadol 50mg had already been given to him at the AED at around an hour ago, [she] ordered intramuscular Tramadol 50mg to be administered to [the Patient] every six hours when necessary. Intravenous injection of Maxolon 10mg every eight hours (if necessary) was also ordered to treat his vomiting... After [her] assessment of [the Patient], [she] explained [her] management plan to his relative including to investigate by way of blood tests and to keep close observation first. [She] further mentioned that [they] might arrange an oes[ophago]-gastro-duodenoscopy examination for further investigation, but only should [the Patient's] condition indicate later."

There was no dispute that results of blood tests on complete blood counts, renal function, liver function, calcium, phosphate, clotting profile and troponin-I were all found to be normal except slightly elevated white cell count to $10.4 \times 10^9/L$. Result of blood gas test done at 19:27 hours was also normal. Spot sugar was however mildly elevated to 13.5mmol/L.

According to Dr LIN's PIC Statement:—

"Records from YCH showed that between around 2300 hours on 22 November 2017 and around 0200 hours on 23 November 2017, [she] was engaged in conducting an emergency operation (laparoscopic cholecystectomy) for another patient with the 2nd call medical officer of that night, namely, Dr Leung... After the said emergency operation was completed, [she] reported to Dr Leung, amongst other new admission cases, [the Patient's] admission, and informed Dr Leung of [her] management plan set out above including the possibility of an emergency oes[ophago]-gastro-duodenoscopy. Dr Leung approved [her] management plan and agreed to keep observation first."

There was no dispute that the on-call House Officer attended the Patient on bedside at around 02:15 hours on 23 November 2017 after being informed that the Patient had developed tachycardia and drop in blood pressure.

According to the Integrated Patient Notes written by the on-call House Officer, the Patient's blood pressure was 102/64mmHg; pulse rate was 105 beats per minute; and oxygen saturation was 95% on room air. The Patient's body temperature was 36.4°C. The Patient was found to be conscious and alert with no shortness of breath and no dizziness. Physical examination showed diffuse tenderness of the abdomen on deep palpation. Per rectal examination however showed empty rectum with no blood. Apart from giving the Patient intravenous Hartmann infusion; ordering for urgent chest x-ray and blood tests; and instruction for close monitoring of the Patient's condition every 1 hour, the on-call House Officer also put down the words "Inform MO (Medical Officer)" under the heading of "Progress & Management".

According to Dr LIN's PIC Statement:—

"Records from YCH showed that [she] was attending other patients... between 0200 hours and 0300 hours, ... and [she] had not received call or notification about the change in [the Patient's] condition during that time... [She] was then engaged in preparing and conducting another emergency operation (incision and drainage of perianal abscess) on [her] own between 0242 hours and 0315 hours for another surgical patient. After the second emergency operation, [she] received requests and attended to the newly admitted patients..."

At around 0345 hours of 23 November 2017, [she] was informed of [the Patient's] drop in blood pressure by the on-call house officer hence [she] attended him for reassessment. When [she] saw [the Patient], he was conscious and conversant at the time. [The Patient] reported he was feeling better as the epigastric pain had improved after the Tramadol injection, he had no dizziness, no chest pain and no shortness of breath. He also had no more episode of vomiting and bowel opening after [her] first assessment. [She] noted he had been given a dose of intramuscular Tramadol at around 0146 hours. On physical examination, his blood pressure was 93/49mmHg and pulse was 90 beats per minute while Hartmann infusion was ongoing. His abdomen remained soft and mild tenderness was palpated over the epigastric area. No rebound tenderness or guarding was found. No pulsatile abdominal mass was felt. Per rectal examination by the house officer found empty rectum. His limbs were cold. His urine output was fair after admission.

[She] reviewed the available blood tests results and noted there was increased white blood cell count..., normal haemoglobin and hematocrit, normal liver and renal function, normal calcium and normal blood pH level. Blood random glucose was 13.5 mmol/L. [She] ordered H'stix to be checked on scene, which showed blood glucose level was 20.4 mmol/L.

Based on the available clinical information especially the low blood pressure, [she] was worried the change of [the Patient's] condition might have been caused by sepsis. [She] therefore ordered close monitoring with charting of input and output, Foley insertion and warm blanket as his limbs were cold and that [the Patient's] body temperature as documented in the Integrated Patient Notes was 36.4°C. [She] ordered septic workup and further blood tests on top of the house officer's blood orders for further investigation on the cause of deterioration. [She] prescribed Actrapid insulin subcutaneous injection and intravenous Augmentin 1.2g every 8 hours for treatment. [She] also ordered one pack of normal saline infusion over 2 hours after Hartmann full-rate infusion. [She] requested to be informed of [the Patient's] condition, should it deteriorate. [Her] plan was to consult the 2nd call medical officer, Dr Leung, when results of the further investigations became available and also to keep [the Patient's] condition and response to antibiotics treatment under close monitoring.

According to the Integrated Patient Notes, the on-call House Officer reviewed the Patient's condition at around 06:00 hours on 23 November 2017. The Patient was found to have low blood pressure, oliguria, metabolic acidosis, creatinine rise, hyperglycemia, raised white blood cell count, hypothermia and worsening abdominal pain. And the on-call House Officer specifically put down "Case d/w (discussed with) Dr Lin v/o (verbal order)... check ABG (arterial blood gas)... urgent consult Med... urgent consult ICU."

There was no dispute that Dr LIN attended the Patient at around 06:45 hours on 23 November 2017.

According to Dr LIN's PIC Statement:—

"At that time, [the Patient's] condition was deteriorating and he developed persistent hypothermia, oliguria and hypotension. His blood tests showed impaired renal function and metabolic acidosis. [She] considered an urgent contrast-enhanced CT scan might aggravate his renal impairment and was not appropriate. In addition, his medical condition was unstable at the time and might not be fit for transportation to the radiological department for a CT scan. Therefore, [she] performed a bedside abdominal ultrasound for further workup.

Mild hydronephrosis was found over the right kidney and there was moderate amount of ascetic fluid. His gallbladder was not distended but there was wall thickening. No gallbladder stone was found. Intrahepatic duct and common bile duct were not dilated... [She] ordered the Augmentin dosage be changed to 600mg every 12 hours in view of the deteriorated renal function.

An ICU doctor arrived to assess [the Patient] shortly after [her] above assessment. [She] verbally explained [the Patient's] clinical condition and deterioration to the ICU doctor, [she] also called Dr Leung to report on [the Patient's] latest situation at around 0700 hours. During [her] call with Dr Leung at the nursing station, [she] was informed by the nurse that [the Patient's] condition was deteriorating rapidly with desaturation and cardiac arrest. [She] updated Dr Leung of the same on the call and immediately went to resuscitate [the Patient]. Dr Leung arrived soon after and joined the resuscitation."

Unfortunately, the Patient's condition further deteriorated; and he developed cardiac arrest again at around 08:05 hours. With the agreement of his relatives, resuscitation of the Patient was discontinued at around 08:15 hours. The Patient was certified dead at 08:40 hours on 23 November 2017.

The Patient's daughter subsequently lodged the present complaint against Dr LIN by email on 8 August 2018.

Dr LIN admitted the factual particulars of the disciplinary charges against her and indicated through her solicitor to the Inquiry Panel that she would not be challenging the opinions of the Secretary's expert witnesses, Dr LEE and Dr CHAN.

The Secretary's expert witness, Dr LEE, held the post of Consultant in Hepatobiliary and Pancreatic Surgery Division of the Department of Surgery of Prince of Wales Hospital. It was the unchallenged evidence of Dr LEE, which the Inquiry Panel accepted, that:—

"... when [P]atient developed shock at 02:15 next day after admission, prompt action was needed to further investigate the underlying cause apart from fluid resuscitation. Since there was no haemoglobin drop whereas there was increasing white cell counts and deteriorating renal function,

septic shock was high on the list. Bowel ischaemia was needed to be excluded in view of diffuse abdominal tenderness and severe metabolic acidosis. An urgent computed tomography (CT) scan should be arranged to exclude intra-abdominal causes like perforated viscera, internal herniation, closed loop obstruction, acute pancreatitis and bowel ischaemia. In case CT could not be arranged, emergency laparotomy should be considered as ischaemic bowel could not be excluded. Early involvement of senior doctor for decision making and ICU support were warranted at this stage. Besides, family should be updated about the rapid deterioration of [P]atient and plan of action explained.”

Dr LIN mentioned in her PIC Statement that when she attended the Patient at around 06:45 hours on 23 November 2017:—

“At that time, [the Patient’s] condition was deteriorating and he developed persistent hypothermia, oliguria and hypotension. His blood tests showed impaired renal function and metabolic acidosis. [She] considered an urgent contrast-enhanced CT scan might aggravate his renal impairment and was not appropriate. In addition, his medical condition was unstable at the time and might not be fit for transportation to the radiological department for a CT scan. Therefore, [she] performed a bedside abdominal ultrasound for further workup.”

It was however the unchallenged evidence of Dr CHAN, a specialist in Critical Care Medicine, which the Inquiry Panel accepted, that:—

“Acute Kidney Injury is another important warning signal. The absolute level of serum creatinine, as measured at 0304 and reported at 0407, was not very high at 202 μ mol/L. [But] This abrupt change of serum creatinine from a normal baseline of 99 μ mol/L over a time interval of only about 10 hours, is typical of patient with severe acute renal shutdown. The renal shutdown was also then matched by the observation of near anuria after insertion of an indwelling urinary catheter. This is highly unusual finding and certainly is suggestive of a severe underlying pathology. With the subsequent findings of metabolic acidosis, [t]he Patient should ha[ve] been already in shock before the time of the blood being taken. With septic shock being the most likely background pathology, considerations should be given to institute vasopressors and escalation of monitoring, which were not noted in the records.

...

Hypothermia is a significant finding in the clinical settings of the Patient. Sepsis is certainly one of the differential diagnos[e]s to be considered. Indeed, hypothermia in the settings of sepsis worth urgent attention in that it is associated with a worse outcome. At 0345 Dr Lin was not informed of hypothermia. When a repeated low reading of 34.0°C was obtained, the intern ... related the information to Dr Lin at around 0600, who just suggested consults to ICU and Medical Department. The key, however, should be prompt workup for probable severe sepsis, and urgent arrangement of imaging of the abdomen should be undertaken...

...

Venous blood sample is not the standard blood test to assess the acid-base disorder of a patient in general. The standard should be a sample of arterial blood gas... An urgent arterial blood sample to delineate better the acid base condition is considered the minimal necessary investigation, together with blood tests like serum chloride, lactate and ketones... In the settings of acute abdominal pain, a finding of severe metabolic acidosis is an emergency needing prompt attention. Differential diagnoses, including peritonitis, septic shock and ischemic bowel, need to be sorted out as soon as feasible.

...

Ultrasound examination at 0645 23/11 showing ascites was also a significant finding... Dr...Lin did notice significant ascites. If the ultrasound findings were correct, ascites cannot be a normal or expected finding. Together with the finding of abdominal pain, acidosis and acute kidney injury, urgent investigation is necessary. I would consider a CT scan of the Abdomen with intravenous contrast an appropriate and necessary investigation at that point in time, irrespective of renal function.”

For these reasons, in failing to order and/or arrange urgent CT scan for the Patient when the circumstances so warranted, Dr LIN had in the Inquiry Panel’s view by her conduct in the present case fallen below the standard expected of registered medical practitioners in Hong Kong. Accordingly, the Inquiry Panel found Dr LIN guilty of misconduct in a professional respect as per the disciplinary charge (a)(i) against her.

It was again the unchallenged evidence of Dr LEE, which the Inquiry Panel accepted, that:—

“[The Patient] further deteriorated at 05:10 on 23 November 2017 with hypothermia, persistent shock and anuria. All these suggested [P]atient had severe sepsis which was likely from abdominal cause with the presence of worsening abdominal pain and distension. Hypothermia signified an even more severe systemic inflammation and infection. Prompt resuscitation and emergency laparotomy must be seriously considered.

...

When Dr LIN reassessed the [P]atient at 06:45 on 23 November 2017, [s]he decided to do a bedside ultrasound. Moderate ascites was revealed, this could suggest transmural bowel ischaemia in case of ischaemic bowel or other sinister intra-abdominal conditions which required emergency surgical intervention. Nevertheless, she decided to wait for repeated blood gas result rather than seek advice from senior.”

For these reasons, in failing to order and/or arrange an emergency laparotomy for the Patient when the circumstances so warranted, Dr LIN had in the Inquiry Panel’s view by her conduct in the present case fallen below the standard expected of registered medical practitioners in Hong Kong. Accordingly, the Inquiry Panel found Dr LIN guilty of misconduct in a professional respect as per the disciplinary charge (a)(ii) against her.

Dr LIN mentioned in her PIC Statement that:—

“Shortly before 0551 hours on 23 November 2017, while [she] was preparing for the fourth emergency operation (incision and drainage of perianal abscess) for another patient, [she] was notified that [the Patient] had further deteriorated with hypothermia, hypotension, oliguria, renal impairment and metabolic acidosis. [She] was unable to leave the operating theatre at that juncture...”

In the Inquiry Panel’s view, even though Dr LIN was preparing for an emergency operation, there was nothing to prevent her from informing Dr LEUNG and/or other senior doctor of the Patient’s deterioration rather than leaving the matter for the on-call House Officer to handle.

In failing to timely inform her senior doctor for decision making, Dr LIN had in the Inquiry Panel’s view by her conduct in the present case fallen below the standard expected of registered medical practitioners in Hong Kong. Accordingly, the Inquiry Panel also found Dr LIN guilty of misconduct in a professional respect as per the disciplinary charge (b) against her.

Acute renal shutdown is a life-threatening condition. In failing to timely inform the Patient’s family members about the condition of the Patient and/or plan of action, Dr LIN had in the Inquiry Panel’s view by her conduct in the present case fallen below the standard expected of registered medical practitioners in Hong Kong. Accordingly, the Inquiry Panel also found Dr LIN guilty of misconduct in a professional respect as per the disciplinary charge (c) against her.

Dr LIN had a clear disciplinary record.

In the Inquiry Panel’s view, the gravamen of Dr LIN’s shortcomings lay in her inadequate alertness about the serious condition of the Patient, which resulted in his rapid deterioration. Given her insight into her shortcomings, the Inquiry Panel accepted that the chance of Dr LIN committing the same or similar breaches in the future would be low.

Taking into consideration the nature and gravity of the disciplinary charges for which Dr LIN was found guilty and what the Inquiry Panel had read and heard in mitigation, the Inquiry Panel made a global order that Dr LIN’s name be removed from the General Register for a period of 3 months and the operation of the removal order be suspended for 18 months.

The orders are published in the *Gazette* in accordance with section 21(5) of the Medical Registration Ordinance. The full decision of the Inquiry Panel is published in the official website of the Medical Council of Hong Kong (<http://www.mchk.org.hk>).

LAU Wan-ye, Joseph Chairman, *The Medical Council of Hong Kong*