Elective in Gastroenterology at Nepean Clinical School

Overseas student

09.03.2015- 05.04.2015

Day 1 09.03.2015 (Monday) Orientation Day

Day 2 10.03.2015 (Tuesday) The first day at the Gastro-department started at 8 am. I got to introduced the team. After we started with ground wards at the N2F we saw a 45 year old patient with an acute upper GI-bleeding. His symptoms were hematemesis, retrosternal pain and tachycardia. The haemoglobin was 6.5 g/dL and so the doctors started a blood transfusion. We asked the patients about any other comorbidities. Besides the GI-bleeding the patients had history of drinking and Hepatitis C. These comorbidities are a classic constellation for a bleeding of oesophageal varices. The doctor decided to undertake a gastroscopy to find the cause and to treat this bleeding. After we went back to ward I studied differential diagnosis of hematemesis.

Day 3 11.03.2015 (Wednesday) Today we started with rounds at 8 am. Afterwards I inserted a cannula and took a blood sample. Then we admitted a 37 year old patient with crohn's disease. He has recurrent symptoms. The patient presented with diarrhoea, abdominal pain, tenesmus and moderate fever. The doctor prescribed a fluid therapy and antibiotics. The surgical department suggested a TPN (total parenteral nutrition), but the gastro-team were not happy about it.

Day 4 12.03.2015 (Thursday) After rounds at 8 am, I discussed some interesting cases with the registrar and did some self-study.

Day 5 13.03.2015 (Friday) Rounds started at 8 am. Afterwards we went to the ED to admit a 45 year old woman with unclear melena and low HB. The patient complained about abdominal pain days before and it's becoming more painful the last few hours. Physical examination showed abdominal tenderness and distension. He is scheduled for the next day for a colonoscopy. Colonoscopy is the best way to diagnose unspecific melena. After rounds I had the possibility to watch a tap. The patient had problems with his breathing! The oxygen level in the blood gas analysis was really low, so the resident decided to do the tap. The pleural effusion was more than 600 ml.

Day 8 16.03.2015 (Monday) We started rounds today at 8.15 am. Afterwards I joined the consultant and the registrar who were performing scopes today.

Day 9 17.03.2015 (Tuesday) One of the consults today was a 75 year old lady in the stroke unit. A few days before she had a stroke; had an anticoagulation-therapy for her stroke. Days later she became anaemic and sleepy. In the gastroscopy you saw a bleeding in the upper GI-tract. The first thought was that it's a cause of the anticoagulation therapy and the gastric ulcer comorbidity. The plan was to treat her nonsurgical, stabilize her HB and raise the dose of the PPIs (proton-pump inhibitor). At 1.30 pm I did some self-study.

Day 10 18.03.2015 (Wednesday) Rounds started at 8 am. After the rounds we discussed the diagnostic and treatment of oedemata. The important things are: document the fluid balance, avoid salt in the nutriment, medication (Furosemid, Torasemid), thorax x-ray, abdomen sonography, transoesophageal echo. We talked about the basic therapy of patients with "acute drinking history". Some of the basic substitutions are magnesium, vitamin B12, nutrients and lactulose to avoid the hepatic encephalopathy.

Day 11 19.03.2015 (Thursday) After rounds at 10 am I went to theatre of endoscopies. The first patient was 55 years old with intermittent reflux esophagitis. The wall of the oesophagus was red with signs of ulcer. Biopsies of the oesophagus wall were taken. The stomach was normal. A follow up is planned for the next month.

Day 12 20.03.2015 (Friday) The day began at 8 am. After rounds I decided to do some self-study.

Day 15 23.03.2015 (Monday) Today I have seen a 48 year old woman with abdominal pain, icterus, fever, tachycardia and hypoxia. She has a hepatitis C infection and they have started to give the specific antiviral medication (ribavirin e.g.) 2 months before. Now she has developed an allergic reaction on the antiviral medication so that they decided to stop this therapy concept. Furthermore the function of the lung is getting worse; the renal function as well. Because of this fluid overload they raise the dose of the spironolactone and minimize the fluid therapy.

Day 16 24.03.2015 (Tuesday) We started the day at 8 am with rounds. Afterwards we went to the ED department and admitted a 24 year old pregnant woman. She is in the 10th week of pregnancy and she had hematemesis ("mouthful bright red") yesterday and two days before. Besides the hematemesis she complains about intermittent nosebleed. It was hematemesis for the first time; no other comorbidities are known. The patient declined taking any anticoagulation medication, any bleeding diseases in her family. She is not anaemic (HB 126), afebrile, no pain since the last vomiting, no melena. Right now the patient is asymptomatic. The consult came to the conclusion that a gastroscopy is not necessary right now but the patient should watch out for signs like melena and abdominal pain. A follow up has been recommended if she will develop any symptoms. He assumed that it is a kind of Mallory-Weiss syndrome during her pregnancy.

Day 17 25.03.2015 (Wednesday) After the rounds I went to the lecture and did some self study.

Day 18 26.03.2015 (Thursday) Today we admitted a 20-year-old obese woman with a 2-year history of gallstones with severe, constant RUQ pain, nausea, and vomiting after eating fried chicken for dinner. She denies any chest pain or diarrhoea. Three months ago she developed intermittent, sharp RUQ pains. On physical examination she has a temperature of 38°C, moderate RUQ tenderness on palpation, but no evidence of jaundice. Risk factor for gallstones and cholecystitis include: female, fat, fair, fertile, family, fourty. Blood test showed increased white blood count, C - reactive protein and elevated bilirubin levels. Right upper quadrant abdominal ultrasound showed gallstones, fluid surrounding the gallbladder, gallbladder wall thickening and a dilation of the bile duct. The patient has been diagnosed with acute cholecystitis. A surgical consultation has been arranged in order to plan the cholecystectomy.

Day 19 27.03.2015 (Friday) There was an 71 old gentleman with PR-bleeding and low HB since 2 days. The comorbidities are ulcerative colitis, HTN, IHD with stent. His standard medication is: prednisone, azathioprine, bisoprolol and statine. He did not take his medication since 2 weeks because he was on holiday. Not to take his medication for the ulcerative colitis could be a reason for his current bleeding. The Plan is: 3x PRBC-fluid, IV. Hydration, K+ replacement, stool and vomit chart, stool sample. After having finished rounds at 11 am I decided to do some self-study and go to the lectures.

Day 20 30.03.2015 (Monday) We started with rounds at 8 am. We had one new patient who has been admitted on Saturday. Mr D. is a 53year old male farmer with chronic alcoholic liver cirrhosis. He complains about abdominal pain. The abdominal pain is getting worse since 14 days. The patient reported about gradually progressive abdominal distension with pin-pricking pain in the epigastrium relieved by medication. He mentioned as well heartburn, fever and a single episode of hematemesis. Past history: Asthma, Hypertension, Diabetes. Personal history: smoking 20 py, chronic alcoholic from past 30 years, lost 10 kg in the past 3 months. Physical Examination: The patient showed palmar erythema, spider naevi, angular stomatitis and mild glossitis. Liver was not palpable but spleen was

palpable by dipping method. Abdomen tense and tender. Ultra sound showed cirrhosis with ascites. Blood test has shown elevated Liver enzymes, GGTP and Bilirubin. The registrar tried to make him aware of the fact that he needs to modify his lifestyle e.g. decreasing alcohol intake, smoking obesity and appropriate nutrition.

Day 21 31.03.2015 (Tuesday) After the rounds I had a teaching about TPN. TPN is the shortcut for total parenteral nutrition. Parenteral nutrition is feeding a person i.v., bypassing the usual process of eating and digestion. The patient receives nutronal formulae that contain nutrients (glucose, amino acids, lipids, vitamins, minerals). It is called TPN when no significant nutrition is obtained by other routes. The indication for TPN is when the GI-tract is non-functional because of an interruption in its continuity or because its absorptive capacity is impaired. The complications are: risk of infection, embolism, fatty liver, loss of liver function, hunger. Because of this possible complication you should not use it for every patients with GI-tract malfunction.

Day 22 01.04.2015 (Wednesday) We went to the ED after rounds at 11 am. A 64 year old gentleman

Day 23 02.04.2015 (Thursday) One of the consults we have seen today was a 29 year old gentleman who presented with upper GI-bleeding yesterday evening in the ED. Last night the Hb was 65 g/L and it raised to 76 g/L after 2 blood transfusions. This morning the patient is stable (normal heart rate, normal temperature, normal blood pressure) expect the abdominal pain and tension. The patient has no drinking history, no signs of portal hypertension. Progress: i.v. cannula, routine bloods. A gastroscopy is scheduled for today.

Day 24 03.04.2015 (Friday) Good Friday

Elective in Endocrinology at Nepean Clinical School

Overseas student

06.04.2015- 03.05.2015

Day 1 06.04.2015 (Monday) Eastern

Day 2 07.04.2015 (Tuesday) The first day at the Endocrinology department started at 8 am. I got to introduce the team. After we started with the ground wards at 4A and 5A we admitted a 25 year old patient with Graves's disease. The patient complained about insomnia, hand tremor, weight loss and hyperactivity. The physical examination showed muscle weakness (especially in the arms), hand tremor, skin warmth. Exophthalmos is getting more symptomatic since a few month. She complains about dry eyes and a progressive feeling of eye pressure. The patient is positive for TSH receptor activating antibodies. The 3 different therapy concepts in treatment of Graves ' disease are 1) antithyroid drugs 2) Radioiodine 3) Thyroidectomy. The registrar decided to start the treatment with carbimazole. A follow up is planned for the next week. Beside the antithyroid drugs, the registrar decided to raise the beta blocker dose to reduce the tremor and the palpitations.

Day 3 08.04.2015 (Wednesday) We started the day at 8 am with rounds. Afterwards we went to the clinic for gestational diabetes. There was a 24 year old pregnant woman (35 week of pregnancy) with hypothyroidism. Her Insulin sheet of the last weeks are fine. At this time of her pregnancy the dose of

Thyroxin is 50 mcg/day. Before the pregnancy the dose was 50mcg/week. In pregnancy you have to put up the dose for 30% and follow up each week. Insulin dose follow up all 3 days. Risk for developing Diabetes II after gestational diabetes is 50%.

Day 4 09.04.2015 (Thursday) The day started with Ward round at 8, seeing all the patients and talking about several cases with Dr. Champion. Presenting patient, with accidental hypoglycaemia from insulin overdose, causing respiratory arrest. Additionally hyponatremia and hypotension. Plan: Septic screen, IVT, monitor BSL commence lower dose insulin, chase septic screen over the weekend. Finishing ward rounds at 12.30, afterwards several councils.

Day 5 10.04.2015 (Friday) After the rounds we had a teaching about hypercalcaemia. It is an elevated calcium level in the blood (Normal range: 9–10.5 mg/dL or 2.2–2.6 mmol/L). It can be an asymptomatic laboratory finding, but because of a hypercalcaemia is often indicative for other diseases, a workup should be undertaken. There is a general mnemonic for remembering the effects of hypercalcaemia: "Stones (renal/biliary), Bones (pain), Groans (abdominal pain, nausea, vomiting), Thrones (polyuria) and Psychiatric Overtones. Causes for hypercalcaemia: hyperparathyroidism, lithium, familial hypocalciuric hypercalcaemia, renal dysfunction, malignancy, hyperthyroidism, vitamin d metabolic disorders (for example: vitamin D intoxication), thiazid use, sarcoidosis, amyloidosis, immobility.

Initial therapy: hydration, increasing salt intake and forced diuresis.

Additional therapy: bisphosphonates and calcitonin.

Day 8 13.04.2015 (Monday) Meeting at 8 am as usual. Ward round with Team B (Park (KP)/Kuo (IK)/Cheung (WC)) Lili and Ravind. Seeing the new patients from the weekend and getting to know their history. CASE Report: Eighteen year old Jeremy Wolthers, a Typ 1 diabetes patient came on saturday through emergency with abdominal pain and vomiting → DKA! The pain started do increase on saturday night and quickly the whole abdomen was involved. When he got to the hospital, his pH was 6.8/ HCO3: 6. Jeremey got the diagnosis T1DM on 02.09.2013, but never had an DKA before. Right now he is living with his parents and sister at home. Medication: Lantus 26 + NR. Due to his good condition he was discharged from ICU. New appointment in 4 days.
Seeing a new patient at ward E3H with a Charcot-Foot (left side) and getting to now his history and talking about his further procedure.

Day 9 14.04.2015 (Tuesday) The day began at 8 am. After rounds I decided to do some self-study about hyperparathyroidism. In primary hyperparathyroidism, there is proliferation of the cells secreting parathyroid hormone (PTH), or chief cells, in one or more of the four parathyroid glands. Oversecretion of PTH leads to hypercalcemia. In 85% of people with this disorder, a benign tumor (adenoma) has formed on one or more of the parathyroid glands, causing it to become overactive. In most other cases, the excess PTH comes from two or more enlarged parathyroid glands (hyperplasia). Secondary hyperparathyroidism is commonly the result of compensatory oversecretion of PTH in response to abnormalities in calcium metabolism in chronic kidney disease and vitamin D deficiency.

Day 10 15.04.2015 (Wednesday) Meeting at 8 am in the morning. Lectures by doctors of the internal medicine (Speech: Gastro & Cardiology). We started with ward rounds at 9 am. After the ward rounds with Dr. Champion and the endocrine team I went to the gestational diabetes clinics. Seeing several

patients and talking about the BSL, their treatment with insulin and/or simply diet. It was very interesting to see the result a simple diet can have. Talking to the pregnant patients about their BSL, which numbers they should achieve and how is possible to achieve those goals. Later in the afternoon meeting with the endocrine team in the clinics building to join a meeting about special cases that the several physicians wanted to present. During this meeting, exciting and very rare endocrine diseases or more common diseases which were hard to diagnose have been presented

Day 11 16.04.2015 (Thursday) Meeting at 8 am in the morning.
CASE: Joining Matthew right away for a „Short Synacthen Test“, which was performed at a female patient who came with initial weight loss and the question of a primary adrenal gland dysfunction. After the cannula was inserted, we waited for 30 minutes before starting the test. This is the normal procedure, so the basal cortisol level won't be higher due to the stress a cannula could cause. To get to know the initial ACTH and cortisol level we took the first blood sample (t=0) before giving the synacthen. Approximately 30 minutes (t=1), and 60 minutes (t=2) after the injection, a blood sample will be taken. After the short test, the patient is free to leave. Normally the results will take 24 hours. After we saw some consults.

Day 12 17.04.2015 (Friday) After the ward rounds we had a discussion about primary aldosteronism. It is excess production of the hormone aldosterone, also known as Conn's syndrome. In the most cases it is caused by a bilateral idiopathic adrenal hyperplasia. Symptoms like high blood pressure, muscle cramps and weakness, low potassium can be the first sign for this disease, but I many cases it can be asymptomatic. To diagnose primary hyperaldosteronism measuring aldosterone alone is not considered adequate. Both renin and aldosterone are measured, and a resultant aldosterone-to-renin ratio is used for case detection.

Day 15 20.04.2015 (Monday) I started today at 8 am with rounds. Afterwards I took a blood culture and inserted an iv cannula into a patient. Then I went with the other australian medical students to the outpatient clinic. We took some patients history and presented them afterwards.

Day 16 21.04.2015 (Tuesday) Starting at 08:00 a.m. with the ward rounds. Seeing the patients on the ward and getting to know their history and further treatment. After ward rounds lecture about arterial diseases – aneurysms and dissections. In the afternoon working on my dissertation and self-study about aneurysm. Aneurysm can be divided into 3 forms: Aneurysma verum – all three parts of the arterial wall are extended (a), aneurysma dissecans – laceration of the intima by which a double, false lumen developes (b), and aneurysma spurium that does not include the intima and media (c). The pathogenesis includes the combination of a decreasing elasticity and a high blood pressure. The therapy depends among other factors on the diameter of the aneurysm. There are conservative approaches like blood pressure therapy and physical rest and also surgically approaches that include the implantation of a prosthesis.

Day 17 22.04.2015 (Wednesday) Starting at 8.00 am with the ward rounds. Seeing patients on the ward and getting to know their history and further treatment. After the ward rounds I went to the gestational diabetes clinic. Seeing the pregnant patients and talking about their history, their Blood Glucose Levels and the way to treat them correctly/best. In the afternoon I decided to do some self-study.

Day 18 23.04.2015 (Thursday) Starting at 8.00 am with the ward rounds. Seeing the new patients and those who were already on the ward and getting to know their history. Thyroid examination teaching during ward rounds: Two patients with Grave's disease: Behaviour (Does the patient appear hyperactive?), hands (Dryness/Sweatiness?, palmar erythema? tremor?), face (dry/sweating skin?, eyebrows?) eyes (exopthalmos?), masses (any swelling/ masses in the area, size?). We also did a palpation of the thyroid to notice the size, symmetry, consistency, masses and palpable thrill. At the end of the physical examination we auscultated each lobe of the thyroid. A bruit would suggest increased vascularity, which occurs in Graves disease.
Teaching class during the afternoon.

Day 19 24.04.2015 (Friday) Meeting at 8 am in the morning. Ward rounds as usual with the endocrine team. Presenting the patient N.C. (20 years old) with new diagnosis of T1DM to the team.Plan: Dietician RV, Diabetes educator RV, TFT, coeliac seology, T1DM antibodies (results in a few weeks). Due to Prof. Hibberts absence, no outpatient clinics today.Preparing todays discharges . Grand ward rounds

Day 20 27.04.2015 (Monday) The day began at 8 am. Presenting patient R.C., a 80 year old female patient who had a hip surgery. Right now hyponatreamia-acute on chronic due to hypovolaemia in setting of Venlafaxin use. Right now planned for BKA. Natrium on 17/03 ->117, 18/03->119, 23/03->123, and on 27/03 126. Planned now palliative.
After rounds I decided to do some self-study.
Bartter syndrome is an inherited defect in the thick ascending limb of the loop of Henle. There are two types of Bartter syndrome: neonatal and classic. Patients with classic Bartter syndrome also have polyuria, polydipsia, and a tendency to dehydration. These patients also have vomiting and growth retardation. Bartter's syndrome consists of hypokalaemia, alkalosis, normal to low blood pressures, and elevated plasma renin and aldosterone.
Treatment: liberal amounts of sodium and potassium in their diet, potassium supplements are usually required, and spironolactone is also used to reduce potassium loss.

Day 21 28.04.2015 (Tuesday) After the ward rounds we saw some consults. One of the consults was a 25 year old patient, 31 week of pregnancy, gestational diabetes, hypothyreose (TSH 1,34); goal of insulin therapy: BGL < 7 after meals, under 5,5 before meal; The risk of developing gestational diabetes in the second pregnancy after gestational diabetes in the first pregnancy is about 60-80%. The Endo team wanted to make clear that a diet is very important to minimize the risk.