Gastroenterology Junior Doctor's Induction Pack

East Surrey Hospital

Dr. M. Rahman 7/24/2018

GASTROENTEROLOGY JUNIOR DOCTORS HANDBOOK

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• Blood monitoring for Ciclosporin

Welcome to East Surrey hospital Gastroenterology Department. The aim of this booklet is to try and ease you into the department over the first few weeks and outline your role.

1) The team:

<u>Consultants</u>		<u>Secretary</u>	<u>Ext</u>
Dr. Jonathan Stenner		Cathy	1777
Dr. Gary Mackenzie		Vanessa	1796
Dr. Azhar Ansari		Vanessa	1796
Dr. Matthew Cowan		Jennie	6781
Dr. Jonathan Nolan		Vanessa	1796
Dr. Gayatri Chakraba	rty	Cathy	1777
Dr. Monira Rahman		Vanessa	1796
Specialty doctors Dr. Alexey Chernoless	skiy	Vanessa	1796
Dr. Ioannis Theodoro	poulos	Vanessa	1796
Specialist Nurses			
Claire Bull (IBD)*		Bleep 542	2815
Louise Gardiner (IBD)	*		2816
Suzanna O'Sullivan (N	lutrition)	Bleep 515	6402
Shelley Gravatt/ Tina	De Souza (Upper GI)	Bleep 813	6686
Maria Lovat (Lower GI)		Bleep 205	1728
Diotition: 700	Dharmacict: Donnio	Place 227	

<u>Dietitian</u>: Zoe <u>Pharmacist</u>: Bonnie Bleep 337

*PLEASE INFORM IBD NURSES WHEN ANY IBD PATIENTS WITH A FLARE ARE ADMITTED - AS EARLY AS POSSIBLE SO THAT THEY CAN SEE THEM ON THE WARD.

Also email a copy of the discharge summary so that follow-up can be arranged.

2) The wards:

The hospital works on a ward-based system and our patients will be on the following wards.

- a) Charlwood ward: Main gastroenterology ward of 20 beds.
- b) **Copthorne ward:** Surgical ward above Charlwood. Any medical outliers on this ward will be looked after by the gastroenterology team.
- c) AMU/ED/CDU/ED escalation: Any patients seen on the post take and <u>taken over</u> by gastroenterology should continue to be seen by gastroenterology each day until moved to a ward (although the AMU ward team should be responsible for carrying out any jobs from the round on AMU).

- d) **Other wards:** There are a few outlier wards that don't have a medical team covering e.g. Brook, Rusper, Endoscopy. Gastroenterology patients should therefore be seen on the ward round.
- e) Liver biopsy patients: You may be called to discharge patents from USS/CT post-liver biopsy. If any concern, please bleep the SpR.

Any gastroenterology patients not on these wards, who are not on the daily post take list, will be seen and looked after by the corresponding ward team with our input until transfer to our ward. Their names, main problem & location should be placed on the board in the Charlwood doctors' office and the bed managers made aware.

3) Patient lists:

The ward list is kept on the shared "I" drive, under "Charlwood Medics lists", then "Dream team".

Please ensure this is updated with new patients every morning before the ward round. The nursing handover sheet is useful to find new patients on Charlwood and you will need to call Copthorne ward to check for any new medical outliers.

Patient details should include: Name, Age, MRN, Date of admission, DNR status, brief accurate problem list, Investigations pending and plan from ward round.

Outliers should be added to the end of the list whilst awaiting transfer to Charlwood ward. Check where any patients accepted by gastroenterology on the previous post take have gone as they may still need to be seen.

4) Post-take ward round (PTWR):

The service is Consultant-led with daily Consultant ward rounds. The Consultant of the week rotates every Friday.

The ward round starts with the post-take ward round on Acute Medical Unit (AMU). It is **essential** that a junior doctor is present on the PTWR at 08.30 every day. This will be coordinated by the Consultant as the time may vary. There is a whatsapp group 'Game of Chrones' which all juniors will be added to, to aid communication with the Consultants. The new post-take patients and locations can be found on the Patient tracking system:

Select Post take ward round > patients with complete assessments & not seen by a Consultant for the previous day AND current day.

Print the list and check their locations on Cerner.

5) Ward rounds:

There is a daily consultant (+/- once weekly SpR) ward round on Charlwood after the PTWR. The junior doctors can do observed ward rounds during the week to increase their learning.

Medical Records

Documentation in the patient's notes must be clear, accurate and legible. This is a **LEGAL** document. Each page needs the location in hospital, patient full name, MRN or DOB and NHS number. If there no patient identity labels in the notes please let the ward clerk know. Each entry needs:

- Date
- Time
- Most senior clinician present
- Signed
- Designation of signatory
- Name of signatory in capitals
- Bleep number

On every ward round please document a brief problem list for each patient and an accurate plan- if unsure please clarify this with the Consultant. Investigations requested by seniors should be carried out promptly and results clearly documented in the notes.

6) Weekend handovers:

The consultant on Friday will also do a ward round of gastroenterology patients on Saturday and Sunday. There is a weekend handover folder on the ward which needs to be completed during the ward round on Friday with a problem list and plan for the weekend. The handover sheets can be found on the shared drive. The consultant will use these over the weekend and then be filed in the patient notes on the Monday.

TTOs will need to be completed in advance for any patients who may be discharged over the weekend and bloods should be requested for the phlebotomists to do if needed. Please ensure that the printer is working as there have been problems over the weekend.

There is a general electronic handover system on PTS if anything needs to be done by the on-call medical team for the weekend e.g. chasing bloods.

7) Discharge summaries:

Discharge summaries should be done as far in advance as possible (especially if patients are to be discharged at the weekend) to ensure there are no delays when the patient is declared medically fit. Please include all relevant investigations and discussions. Please do not cut and paste full radiology reports- summarise the main relevant findings. If unsure please ask the Registrar.

8) Patient deaths:

When completing death certificates please ensure you have discussed the cause with the Consultant and completed an electronic GP mortality review on PTS. It is in your interest to do a thorough detailed job as you will be asked to present these patients in the M&M (see below) and can often just copy these summaries in straight-forward cases.

For any unexpected deaths or for those referred for PM, you may have to get more details from the notes or contact the coroner for the result: E-mail coroners officers@surrey.pnn.police.uk from an nhs e-mail account with patient's details and request outcome for the M&M.

9) Meetings:

Day and Time	Meeting	Location
Tues 08.00- 08.45	Lower GI MDT	PGEC, John Hammond LT
08.45- 09.30	Upper GI MDT*	
12.30- 13.30	Benign radiology meeting**/ IBD	XRay department
	cases	
Thurs 13.00- 14.00	Grand Round	PGEC, John Hammond LT
Once a month	Morbidity + Mortality (see below)	PGEC, Seminar Room 1
Twice a year	UGIB M+M (see below)	Charlwood

^{*}UGI/HPB MDT: To add patients please contact Jeanette Deboo ext.2170. Also inform UGI CNS. F1/SHO do not need to attend.

10) Departmental teaching:

Teaching can be arranged every week by the juniors to learn about a new topic and share that knowledge with your peers. The Consultants will attend as much as possible. It can be on anything e.g. an interesting case (gastro or general medical), journal article (e.g. GUT, Hepatology, Gastroenterology, BMJ) etc. for about 30 minutes.

Someone should take charge of ensuring the room has been booked with the PGEC and organising a timetable for the juniors to present. If you are unable to do the date that has been allocated to you, *it is your responsibility to swap*.

^{**} Attended by gastroenterologists, surgeons and radiologists. Useful if any inpatient scans need reviewing and input required from surgeons/radiologists.

11) Endoscopy:

The endoscopy department is close to Charlwood ward. The coordinator is Jackie Knight and the sister in charge is Rosemary Goodchild. There is a daily afternoon UGIB (upper GI bleed) emergency list.

UGI and LGI endoscopy referral forms are available on the ward and intranet. Inpatient requests will only be accepted when signed by a consultant endoscopist so try to get the forms signed by the Consultant on the ward round. Forms that are handed in and not signed will take longer to be booked, so if urgent try and ask a Consultant Gastroenterologist in Endoscopy.

Important points:

- Ensure patients going for urgent UGI endoscopy are NBM for at least 4 hours (Prescribe IV fluids if needed)
- Conversely if you know the endoscopy is not happening that day can they E+D?
- Ensure pt has up to date clotting profile and review of anticoagulants/antiplatelets
- Most patients having flexible sigmoidoscopies need an enema 30 minutes before (except in acute severe colitis)
- If you ever need to prescribe bowel prep for colonoscopy make sure it is exactly as specified in their instructions from endoscopy.
- Screening lists (e.g. ERCP) only happen Tues/Thurs and need to be agreed with Dr Stenner

12) Morbidity and Mortality (M+M) meeting

There is a monthly meeting held on Friday morning in the PGEC. Dr. Chakrabarty is the Lead Consultant for this. Junior doctors are expected to prepare an anonymised Powerpoint presentation for each deceased patient (see examples of previous presentations in the "Dream Team" folder in the I drive).

13) Clinics

SHOs are expected to attend clinics whenever possible (depending on ward cover etc). They will not have a separate clinic list but will see from the consultants' list. Some clinics are held at Crawley and Horsham. A list of all clinics is available on request but you will need to check if there is room capacity beforehand. Suitable clinics include Dr Cowan (Mon pm alternate weeks) and Dr Mackenzie (Wed pm). You will need to get in touch with the Dictate IT department (Sharon Bailey ext 6783, Sharon.bailey3@nhs.net) to get access and training for digital dictation.

14) Annual leave/Study leave:

There is a google calendar (user: gastroenterologyesh@gmail.com, password: gastrorota) which you should fill in with all your GIM on-calls and zero days as soon as possible to allow planning for leave. The GIM rota coordinator for swaps and other rota issues is Dr Nayeem Khan (naveem.Khan@nhs.net). The aim is to have at least 2 juniors on the ward in the morning and ideally in the afternoon. (e.g. 1 F1 + 1 SHO). You should discuss leave early! Leave forms must be signed by first the SpR rota coordinator and then finally by Dr Cowan. We will always try our best to get everyone their leave.

We really hope you enjoy your placement in Gastroenterology!

15) <u>The liver patient</u> (PLEASE ALSO SEE DECOMPENSATED LIVER DISEASE CARE BUNDLE ON INTRANET)

Most of the patients you will see will have known chronic liver disease rather than acute liver failure and may present with one of its complications.

i) General investigation for all liver patients:

Bloods: FBC, U&E, LFTs, GGT, AST, (Clotting, platelets, albumin are useful markers of liver synthetic function and presence of cirrhosis &portal hypertension)

Blood liver screen: Viral serology (Hep B, C, HIV, inc Hep A, E, EBV, CMV if acute presentation), immunoglobulins, autoantibody screen, ferritin, AFP, alpha 1 antitrypsin, caeruloplasmin (if age <50) (found on Powerchart requests under Liver screen and Immunology). — Ensure patient has had full liver screen before. In cases of acute decompensation of previously stable chronic liver disease recheck AFP.

Imaging: USS abdomen/liver. Repeat if not done in last 6 months or acute worsening of symptoms. Ensure you have requested portal vein and hepatic vein dopplers to exclude thrombus as the cause of decompensation.

ii) General causes of decompensation:

Sepsis,

UGI/variceal bleed

Drugs/medications e.g. antibiotics,

Ongoing alcohol use

Hepatocellular carcinoma (HCC)

Portal/hepatic vein thrombosis.

iii) Complications of chronic liver disease:

- Hepatic encephalopathy: Precipitants include GI bleed (increased protein and ammonia), dehydration, constipation, electrolyte disturbance (e.g. low Na), sedating drugs, ETOH, sepsis, HCC. Rx: Treat the precipitating factors, high dose lactulose 30ml TDS, enemas if necessary to ensure BO 2/day, often empirical broad spectrum antibiotics if high grade encephalopathy. Consider ITU if low GCS.
- Variceal bleed: Manage as per other UGI bleeds (see later) but also treat with terlipressin 0.5-2mg QDS (caution if IHD or very hypotensive) and broad spectrum antibiotics. Target Hb and BP lower than would be for other UGI bleeds to avoid

- increasing portal pressure and precipitating rebleed. (e.g. Hb 8, BP 100 systolic). Urgent OGD.
- Ascites/SBP: Diagnostic tap (see later) required if 1st presentation or acute deterioration. SBP confirmed if fluid WCC/neutrophils >250 (still consider if high clinical suspicion or already on antibiotics). Rx: Daily weight monitoring, low sodium diet, diuretic therapy spironolactone 100-400mg/daily +/- furosemide (aim weight loss 05.kg-1kg per day, hold if worsening renal failure or Na <130). Consider paracentesis if needed. If SBP, treat with tazocin 4.5g TDS and consider albumin infusion if signs of developing renal impairment. Will need long term ciprofloxacin 250mg BD prophylaxis after 1st episode SBP.
- Hepatorenal syndrome (HRS): The most severe complication of portal hypertension, associated with worsening renal failure in liver patients with ascites where there is no other cause of renal failure i.e. exclude other causes such as dehydration, nephrotoxics etc. HRS is due to peripheral arterial vasodilatation together with intense renal vasoconstriction. Rx: Treat hypovolaemia with human albumin solution, consider terlipressin if no response after 24 hours.
- Alcoholic hepatitis: Consider in active alcoholics with acute jaundice (bilirubin disproportionally raised compared to ALT & ALP) where an obstructive cause has been excluded. Rx: Work out Maddreys discriminant function. If > 32 consider steroids (pred 40mg for 4 weeks write on the TTO to then reduce by 5mg per week) if no GI bleed or sepsis.

iv) Other general considerations in treatment

- Pabrinex I+II IV TDS for 3 days if ETOH (switch to oral thiamine/vit B costrong)
- ETOH abstinence
- Detox regime if required: please refer to Trust ETOH detox guidelines using PRN doses and CIWA scores are to be stored under Acute Medicine > Policies.
- Consider NAC if paracetamol
- Dietician review (often malnourished)
- Vitamin K 10mg IV 3days (not in acute liver failure unless actively bleeding as used in monitoring/prognosis and may confuse picture)
- Use Kings College Liver Unit criteria for assessing acute liver failure
- Child Pugh and MELD/UKELD are useful scores for prognosis in chronic liver failure

Abdominal Paracentesis

Indications

- Tense ascites, splinting diaphragm
- Large volume ascites resistant to diuretic therapy.
- Malignant ascites/palliation
- Diagnosis

Contraindications:

- Risk of bleeding (relative)
- Overlying cellulitis
- Loculated ascites (relative)
- Multiple abdominal surgeries (Relative)
- SBP on ascitic tap (Normally treat infection first unless significant symptoms)

Equipment:

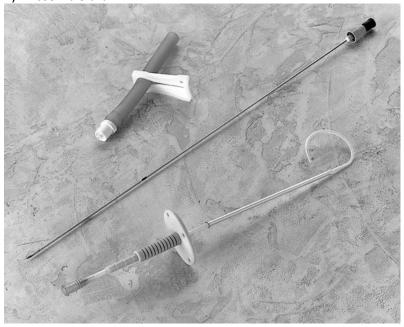
- 1 x sterile gloves
- 1 x dressing pack
- 1-2% lignocaine
- 1 x 10ml syringe, 1x 20ml syringe
- 2 x green needles, 1 x orange needle
- Chloraprep
- 1 x scalpel
- 1 x 2L catheter drainage bag
- 1 x pig-tailed "bonano" catheter
- 3 x universal containers, 1 x set of blood culture bottles
- 4 x cannula dressings

Procedure:

Prior to starting:

- Consent must be gained from patient.
- Check the clotting.
- Make sure the patient is cannulated and you have requested 20% human albumin solution (HAS) (At least 5 for large ascites) from blood bank.
- Make sure you are familiar with the type of drain and that you can connect it to the drainage bag (i.e. do you need a special bag or connector?).
- Make sure you can clinically detect the ascites and you pick a safe area. Commonest safe area is ½ between the ASIS and umbilicus. Less common but used area is 2cm below the umbilicus.
- 1) Clean area with Chloraprep
- 2) Draw up and inject lignocaine (first form a bleb under the skin with the orange needle and then advance with a green needle perpendicular to the skin aspirating prior to injecting). Stop once you reach ascites. Use this as an estimate to the depth needed to reach.

- 3) Use the scalpel if needed to make a "knick" in the skin to slightly widen the opening.
- 4) Assemble drain:



- 5) Straighten out the pig tail with the outer plastic tube prior to advancing the needle through. (Remember to remove the outer plastic tube after this!)
- 6) Connect a 20ml syringe to the top of the needle
- 7) Advance the needle (again perpendicular to the skin) aspirating as you go and keep a hold near the distal end of the needle to prevent going in too far. It can be quite a push and you should normally feel a give. Once ascites is aspirated advance another 1cm to make sure the end of the catheter tube is in the cavity. Aspirate 20ml to send off.
- 8) Advance the catheter over the needle (should go in smoothly without resistance) until the hilt is against the skin.
- 9) Remove the needle and connect the rubber tubing which then connects to a catheter drainage bag.
- 10) Stick the hilt down with your cannula dressings. For other drains you will need a special dressing to hold it in or may need to stitch it in.

Post procedure:

- Send off samples for microbiology (Cell count and M,C&S), biochemistry (protein, albumin, amylase, glucose), cytology.
- Make sure the cell count is chased to rule out SBP.
- For ascites in cirrhosis leave on free drainage for 6 hours before removing.
- For every 2 litres drained, replace IV with 100ml 20% HAS.

<u>Diagnostic tap:</u> For a tap, the set up is pretty much the same as above but often local anaesthetic is not required as essentially you are performing a tap anyway. Aspirate 20ml and send off.

<u>Out of hours</u> (for urgent M,C,S) you need to contact micro at Crawley to inform and then arrange a courier via East Surrey switchboard to collect sample from pathology specimen reception

INITIAL MANAGEMENT OF ACUTE SEVERE COLITIS (on intranet)

Definition (Truelove & Witts Criteria)

BO >6x /day with blood PLUS ≥1 of:

- o Temp >37.8 °C
- o HR >90 bpm
- o Hb <105 g/L
- o CRP >30mg/L

Consider differential diagnosis:

Bacterial infection (C.diff; Campylobacter; Salmonella; Shigella; E.Coli) Viral infection (if already immunocompromised) Amoebiasis (esp if travel history) Diverticulitis / Ischaemia



Investigations

- FBC*, U+E*, CRP*, LFTs*. Bone, Mg, lipids, G+S;
 Blood culture if temp >38°C *Repeat Daily
- Stool MC+S, C.diff
- AXR + CXR
- CT Abdo/Pelvis if signs of perforation (discuss with senior first)



Initial Management

- Accurate stool chart
- Rehydrate and correct electrolyte imbalance
- Hydrocortisone 100mg gds IV (with Adcal + PPI)
- Mesalazine 2.4g bd po
- Enoxaparin 40mg od s/c
- Metronidazole 500mg tds IV if 1st/atypical presentation or immunocompromised
- Dietitian Review
- Transfer to Charlwood ward ASAP



REFER TO GASTRO TEAM ASAP

Gastro SpR bleep 198/636 IBD Nurses ext 2815 bleep 542

Initial management of acute severe colitis/IBD continued

Clerking:

Crohns or UC, Establish date of diagnosis and onset of symptoms, Distribution of disease, Date of last relapse, Date of last endoscopy and result/biopsy results, current and previous treatments (number of steroid courses, other immunosuppressants, previous failures or intolerances)

Other investigations:

- TPMT and viral serology (Hep B, and C, EBV, CMV, VZV) if considering immunosuppressants or biologics.
- UC is mucosal disease and shouldn't cause severe pain. Consider CT to look for other causes of pain.
- A flexible sigmoidoscopy should be considered if presentation atypical or lack of response.

Other management:

- PR predfoam enema if tolerated
- Consider surgical opinion if significant symptoms, CRP very raised, dropping albumin, not responding to treatment.
- If patient responds to IV steroids then convert to a reducing course of oral prednisolone with PPI and Adcal D3 cover.
- If no response by day 3, consultant will consider rescue therapy with ciclosporin/infliximab or surgical options.

Simplified guidance for gastro juniors for ciclosporin:

Decision to start ciclosporin as inpatient for severe UC made by Consultant Gastroenterologist:

<u>Main considerations/cautions: Allergic reaction, seizures, hypertension, renal impairment, immunosuppression</u>

- 1) Prior to starting:
 - Routine up to date bloods and CXR
 - Check stool cultures done
 - Check magnesium and cholesterol (Increased risk of seizures if low)
 - Send TPMT, viral screen
 - Review drug charts for nephrotoxics
- 2) On ciclosporin: (Usually IV 2mg/kg for 2 5 days)
 - Monitor for allergic reaction
 - Monitor stool chart
 - Monitor for evidence of infection
 - Daily abdominal examination
 - Blood pressure (If systolic >150 despite Rx then may need to reduce dose)
 - Daily Bloods (If creat >30% from baseline or LFTs x 2 then may need to reduce dose)
- 3) On discharge: (switched to PO ciclosporin 5mg/kg split into 2 doses/day)
 - Weekly bloods (FBC/U&E/LFTs/CRP/ESR) for 2 weeks
 - 2 weekly bloods for 4 weeks
 - Monthly bloods
 - Keep on bottom of list to check and inform IBD nurse of discharge for FU

Work up for anti TNF therapy similar with viral screen and CXR prior to administering. IBD nurse will arrange continued treatment on discharge.

INITIAL MANAGEMENT OF ACUTE UPPER GI BLEEDING

Clinical assessment:

1) Assess haemodynamic status: if UNSTABLE (signs below) RESUSCITATE 1st

:P >100bpm; BP <90mmHg systolic; postural drop; capillary refill >3s; Decreased conscious level; UO <30-40mls/hr

- 2) Evidence of blood loss and risk factors
- Haematemesis/melaena/coffee-ground vomiting*/collapse/PR bleeding
- Examination: PR to check for melaena; ?signs of chronic liver disease
- PMH: Peptic ulcer; liver disease or known varices; IHD/Respiratory disease
- DH: Antiplatelets/NSAIDs/NOACs

* exclude SBO with AXR particularly if also presents with abdominal pain



Immediate management:

- IV access (large bore)
- Urgent FBC, U+E, LFTs, CRP, Clotting, G+S, VBG- lactate
- Resuscitate with crystalloids; monitor fluid balance; may need catheterisation and CVP monitoring to guide resuscitation
- Transfusion:
 - Activate massive haemorrhage protocol if massive variceal bleed
 - Aim to transfuse packed red cells to keep Hb 70-90 g/L
 - Avoid over transfusion in variceal bleed: keep Hb 70-80g/L
 - Give platelets if <50 x10⁹/l and actively bleeding
 - Give FFP (12-15ml/kg) if fibrinogen <1g/l or INR >1.5/PT >1.5x normal
- On warfarin and actively bleeding:
 - If INR >1.5 give Vitamin K 5mg IV
 - Consider prothombin complex concentrate (Beriplex) if unstable: discuss with Haematology on-call
- In suspected variceal bleed:
 - Give Terlipressin 2mg stat (caution in IHD- review ECG)
 - Start Tazocin 4.5g tds IV
 - Inform ITU early if uncontrolled bleeding; encephalopathy; aspiration
- Calculate Blatchford score (see below): if score 0 discuss with senior about discharge with early OPD OGD

ADEQUATE RESUSCITATION BEFORE OGD IS ESSENTIAL

INITIAL MANAGEMENT OF ACUTE UPPER GI BLEEDING

Blatchford score

0: Discuss with senior about early discharge with OPD endoscopy

≥ 1: Admit for resuscitation and inpatient endoscopy

≥ 6: Predicts need for blood transfusion and endoscopic therapy

Admission risk marker	Score
Blood Urea mmol/L	
≥6.5 -7.9	2
8-9.9	3
10-24.9	4
≥25	6
Haemoglobin g/dL (men)	
≥12 -13	1
10-11.9	3
<10	6
Haemoglobin g/dL (women)	
≥10-12	1
<10	6
Systolic blood pressure	
mmHg	
100-109	1
90-99	2
<90	3
Other markers	
Pulse ≥100	1
Presentation with malaena	1
Presentation with syncope	2
Hepatic disease	2
Cardiac failure	2



Endoscopy:

- Keep NBM
- Arrange OGD asap after resuscitation if initially unstable
 - In hours: speak to nurse in charge in Endoscopy
 - Out of hours: discuss with senior re: informing on-call Gastro Consultant