Hepatology and Gastroenterology at the Royal London Hospital

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INTRODUCTION

For my elective, it was decided that I would spend six weeks at the hepatology and gastroenterology department at the Royal London Hospital. During this time, I was under the supervision of Doctor Sushma Saksena, a consultant Hepatologist.
Dr Saksena, kindly, arranged a timetable for me for the six weeks, consisting of a range of activities and opportunities, some of which included outpatient Liver clinics, Multi-disciplinary team meetings for both cancer and hepatitis patients, Consultant led ward rounds and teaching.
The fact that majority of my training at Barts and The London Medical school was based at the Royal London Hospital, I was very familiar with the hospital layout and equipment, meaning I could be optimally involved in the medical team from the very get go. Furthermore, the range of activities available to me, I feel I was able to cover my learning objectives and gain some valuable lessons and experiences, which ultimately will mean I can be better prepared for work as a foundation year one doctor in August 2017.

WHAT ARE THE COMMON DISEASES SEEN IN HEPATOLOGY?

One of the reasons why I was happy with undertaking a medical elective in liver medicine was given my medical training, I had had very little exposure to liver disease and therefore majority of my understanding of liver disease was very “textbook”. During this placement, I was able to explore the various presentations of liver disease by speaking to and examining patients as well as discussing their management with senior doctors. In order to explore this learning objective, I would like to summarise my understanding of several common liver diseases, and where possible reflecting on cases that I saw during my time in the department.

HEPATITIS B

Hepatitis B is a DNA viral infection. It is spread by contact with bodily fluids (Sexual intercourse, vertical transmission, blood transfusions, IVDU, tattooing etc.). It is considered 100 times more infectious than the Human Immunodeficiency Virus (HIV). A Hepatitis B infection can be either self-limiting or chronic. Studies suggests that adults are more able to clear the disease acutely, whilst being infected during childhood is likely to result in a more chronic picture of disease. With Chronic disease, there is a 40% chance of developing liver cirrhosis or Hepatocellular Carcinoma. Therefore, patients with chronic disease will need constant surveillance. Treatment for Hepatitis B is only effective during active disease, therefore patients have routine appointments to check their liver function and viral load, and should their disease be found to be active, appropriate treatment can be initiated.

HEPATITIS C

Hepatitis C is an RNA viral infection. Similar to Hepatitis B, it is spread by blood contact. There are six genotypes of the Hepatitis C virus. Knowing the genotype is important, as it will determine a patient’s treatment. Majority of cases of HCV develop into a long

term condition, as very few can clear the virus in the acute phase. There is currently no vaccination available for HCV, and given the potential for infection to lead to liver transplantation, the virus is treated aggressively.

LIVER CIRRHOSIS

Liver Cirrhosis is a condition paramount to organ failure; it describes the process of hepatic tissue being replaced by scar tissue. Typically, the disease develops over a long period. At the early stages of the disease, the patient may not experience any symptoms, but as the fibrosis gets more extensive, they will start to experience the signs and symptoms associated with decompensated liver disease (ascites, jaundice, impaired clotting). Liver cirrhosis has a range of causes such as (1) Alcohol Liver Disease (2) Hepatitis B (3) Hepatitis C (4) Fatty Liver Disease. Complications of Liver Cirrhosis include (1) Hepatic encephalopathy (2) Upper GI Bleeds (3) Hepatocellular carcinoma. There is no treatment that will reverse fibrosis of the liver, so patients are treated conservatively to limit further damage. Some patients may require liver transplantation however given the shortage of organ donors, this option is not available to all patients.

NON-ALCOHOLIC FATTY LIVER DISEASE

Non-alcoholic fatty liver disease (NAFLD) is a condition whereby fat is deposited on the liver, which can cause damage to the structure of the liver and leading to fibrosis. If left unchecked, the fibrosis could lead to cirrhosis and ultimately organ failure or hepatocellular carcinoma. Elevated liver enzymes and an ultrasound scan, which would demonstrate steatosis, are needed to make the diagnosis of NAFLD. The patients I saw in clinic with NAFLD usually had an elevated BMI and concomitant diabetes. Research has shown that poorly controlled diabetes can influence the disease process and accelerate the scarring of the liver. There is currently no treatment for NAFLD, and patients are given lifestyle advice about diet and exercise. If a patient has a diagnosis of diabetes, general practitioners are advised to have a lower threshold to treat these patients, as tight diabetic control will improve the disease progression.

WHAT SPECIALIST TREATMENTS ARE AVAILABLE TO PATIENTS WITH LIVER DISEASE?

Diseases of the liver are varied, and therefore there is a range of management and treatment options for patients.
One of exciting experiences was being able to observe during an endoscopy clinic with Dr Saksena. Endoscopy is a main investigatory tool for patients with Liver disease as well as gastroenterology disease. With Endoscopy, the mucosa of the GI tract can be visualised and any pathology such as ulcers or varices can be identified and treated. Not having had any experience with endoscopy during my medical training, it was interesting to observe the procedure and where appropriate help out. For me, it was fascinating to watch peristalsis of the stomach and gut, the fluid movements of the ruggae to the opening of the pyloric sphincter are images I will keep in mind forever.

Another area of liver disease that I experienced during my placement was the Hepatitis C multi-disciplinary team meeting. Previously, the treatment for Hepatitis C (Peg-interferon and Ribrovarin) caused many side effects for patients and they were considered a poor treatment option for patients. Fortunately, research has found a more effective treatment with a reduced side effect profile and it demonstrates to me the ever-evolving nature of medicine. Medicine and research are constantly finding new discoveries, and it is heartening to see doctors explain proudly to their patients that there is a better treatment for their Hep C

infection. However, the issue with new treatments is the price tag, and this has limited the hepatology department to be able to treat around six patients a month. This means all cases are discussed in a multi-disciplinary team meeting involving clinicians, nurses and social workers. It was interesting to attend each week, to see cases being presented and discussed and how the team formulates a management plan for patients.

With regards to specialist care, Dr Saksena gave a thought provoking talk during one of the MDTs regarding the role of palliative care in liver disease. She explained that currently patients with chronic liver disease do not have appropriate access to community-based palliative care, which she argued is a critical duty of the department to ensure patients have a good quality of life even after their disease is considered incurable. Following on from her talk, I understand that the department is trying to formulate a protocol for such patients to ensure that when they are discharged from the hospital that they have access to appropriate symptom management from the palliative care team. Observing consultants discussing palliative care and its importance really reinforced to myself that doctors have a duty to ensure patients have opportunities to improve their quality of life, regardless of their prognosis..

WHAT IS THE PATTERN OF LIVER DISEASE IN THE UK, WITH A PARTICULAR REFERENCE TO ALCOHOL USE?

Liver disease is considered to be the fifth biggest killer in the UK, following cardiovascular disease, stroke and cancer. Unfortunately, the mortalities from liver disease are also increasing whilst the figures from other big killers are on the decline. It is estimated from figures that around 16000 people die a year in the UK due to liver disease. It is also important to note, that the liver is a very robust organ, and patients can survive with up to 70% damage to their liver, however this has put a major economic burden on the NHS to manage these patients with chronic disease. It is estimated that approximately a third of the Liver related mortalities are due to alcohol liver disease. Alcohol is a major burden on the NHS; data shows that 800,000 admissions to hospital a year are related directly or indirectly to alcohol.

During my placement, I met a patient with Alcohol related liver disease; speaking to her it was surprising to learn about her diagnosis and despite multiple admissions to hospital to treat her for varices and pleural effusions related to her condition, she still continues to drink alcohol, knowing full well the consequences it would have on her health.
Speaking about the case with my seniors, they helped me to understand that the stigma around alcohol liver disease does no favours, and that patients should not be referred as ‘alcoholics’ but rather as alcohol addicts. He explained that alcohol can cause a serious dependency and tolerance in patients and that we should not view it any different to any other disease.
Regarding this patient, once her encephalopathy was treated, the medical team had made a referral to an alcohol liaison nurse. This is an interesting to know that patients with alcohol related disease have access to this support and guidance to help manage their addiction. This particular patient has decompensated liver disease, with a high Child-Pugh score; therefore, her prognosis does not look good. It is important for her to be able to be abstinent from alcohol for at least one year to be considered for a liver transplant, which may be her only option of a cure.

PERSONAL AND PROFESSIONAL DEVELOPMENT

The transition from medical student to junior doctor is never smooth, however it does not mean that new graduates lack training, but rather it is the experience of seeing what the job actually entails asides from the medical theory and clinical skills thought at medical school. The time I spent with the junior doctors during this placement was valuable to me and I am very grateful to the team who treated me as an equal and as such gave me responsibility during my time on the wards.
Ranging from documenting examination findings in patients' notes, to performing clinical procedures and calling other teams to make referrals and booking investigations. These are skills not necessarily taught in medical school, but rather considered workplace based experiences. Getting the opportunity to get to grips with electronic patient records and anxieties associated with calling senior colleagues for advice regarding patient care were all valuable experiences for me.

Having had training posts at several hospitals, I have experienced different types of patient notes documentation. When I discussed this with Dr Saksena, she gave me an assignment to compare the advantages and disadvantages of both paper based note system and electronic based notes. Furthermore, during my time on the placement, the hospital experienced a "system crash' meaning that patients' recent blood results could not be viewed on the electronic computer system. This had an obvious impact on patient care, as patients who had delicate electrolyte imbalances had to be subjected to regular venous blood gas injections, as the labs were unable to process results. This meant there were queues of doctors waiting to use the Blood gas analyser, it goes to show how useful technology is in streamlining investigations, and results, meaning that patients can be managed both effectively and quickly.

One of key skills needed in hospital-based medicine, is the ability to work with several different individuals throughout the working day. This at times can be difficult because for example, you are trying to chase the dietician down to discuss the differences between nasogastric and nasojejunial tubing, but they are busy attending to another patient who has complex needs. This can delay your workload and mean you cannot appropriately discharge a patient without all the involved teams have offered their input. Furthermore, when various individuals are involved in the care of a particular patient, whilst the intention to improve the patient's health, different clinical members may have different opinions about how to go about managing a patient. It is important that any clinical differences are discussed and professionally managed.

Then it is important to add into the mix, how doctors communicate with both patients and their relatives. During my time, I saw great examples of communication skills with patient's relatives who were being 'difficult' during their time on the ward, these experiences again are not formally taught in medical school so to get an exposure to such fine examples was definitely of huge benefit to me. Therefore, the dynamics of working in such a diverse hospital setting definitely gave me food for thought about how I might go about dealing with certain situations should they occur during my medical career.

CONCLUSIONS

My time in the hepatology department has been very beneficial to both my learning and professional development. The lessons I will take away regarding both liver disease and ultimately how to manage patients on the ward will definitely help me in my future career.

I have seen several examples of liver disease and how each of these conditions are managed, whilst I may not be undertaking a gastroenterology post during my foundation years I believe after this placement I am more familiar with interpreting LFTs and diseases that I will be able to make informed referrals to the Liver teams if necessary.

I would also like to, at this point, thank the staff at the hepatology department for giving me a truly valuable elective experience and for making me a part of their team during my time with them. I feel that during this time with them, I have been able to develop my clinical skills as well as learn new skills, which I hope will allow me to become a better and more competent doctor for the future.