A Lesson I've Learnt ...

Dr Peter A. Fenech
Family Doctor

A 53 year old man of sound constitution, and with a past history of peptic ulcer disease and mild diabetes mellitus, suddenly developed severe epigastric pain with occasional vomiting over the weekend.

I was called to examine him, but found no significant abnormal clinical signs except epigastric tenderness. He had opened his bowels, and appendicitis and intestinal obstruction were excluded. There was no icteric tinge, and his urinalysis was normal. He was an obese individual, known to be a mild diabetic well controlled with dietary measures alone. He was not on any regular medication, drank alcohol socially and smoked 5 or 6 cigarettes daily.

After 48 hours of conservative treatment, the pain, which was the predominant presenting complaint had not settled down. I called in a consultant surgeon for a home visit, and he advised urgent admission for investigation at St. Luke's Hospital, due to a possible epigastric mass.

See ticket of referral figure 1.

TICKET OF REFERRAL OF A PATIENT TO HOSPITAL
DEPARTMENT OF HEALTH
Part A
To be filled by Medical Practitioner referring a patient to hospital.

Referral to .... Hospital

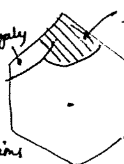
Hospital No. ....
(if any)
I.D. Card No. ....
(if patient has an Identity Card)

Referred for Investigations. To SOP. Dept.
Mr Lorin.

Relevant Clinical History
2 day episode of epigastric pain not associated with nausea or vomitting. PH: peptic ulcer.
O/E Obese, tenderness epigastric region with ? mass.
? Hepatomegaly.
Advise: SOP for investigations

? hepatomegaly
Tenderness epigastrium ? mass

Treatment/Observations



Signature ....
Date ....
Name and Address (Printed or Block Letters)
Dr Balmanin
SLH

Investigation results were as follows:

ESR	34 mmol/l ↑
Random Blood Glucose	14 mmol/l ↑
Serum Amylase	33 units/l
Hb: 17.9 g/dl	WBC: 9,300
MCV: 89.6	MCH: 29.6
Platelets: 309,000	
Bilirubin: 16µmol/l	
Alk. Phosphatase: 242 U/l (NV 98-279)	
Gamma GT: 225 U/l ↑ (NV 11-50)	
ALT: 24 U/l (NV 0-40)	
Urea: 5.4 mmol/l	[Na]: 132 mmol/l
[K]: 4.8 mmol/l	[Cl]: 95 mmol/l
Prothrombin time: 18 seconds (control 16 sec.)	
HBsAg: negative	
Mid-stream urine culture:	no significant bacteruria
Chest X-Ray:	normal
CAT Scan abdomen:	showed an enlarged left lobe of the liver and a 2 by 3 centimetre tumor of the left adrenal gland
Ultrasound abdomen:	noted gall bladder stones, a 12 by 7 cm mass in the epigastrium which appears to be in the liver.
Alpha fetoprotein, 17 ketosteroids, urine VMA's and serum cortisol were ordered.	

Over the next 48 hours, a gastroscopy and trucut liver biopsy were performed. The gastroscopy was normal, but the liver biopsy performed on the 12th April 1989 confirmed metastatic liver disease.

At this stage, the preliminary diagnosis was left adrenal tumor with metastatic disease of the left lobe of the liver, and non-insulin dependent diabetes mellitus.

On the surgeon's recommendation, the patient was referred to the liver unit at King's College Hospital within a week. Under Dr. Roger Williams, all investigations were repeated and his case was continually reviewed. Finally, in conjunction with a team at Adden Brooke's Hospital in Cambridge, Dr. Williams decided that this was a suitable case for liver transplant. The transplant was performed on the 13th June 1989 at Cambridge, exactly two months after I had seen him. After a three week stay, he was transferred to King's College Hospital, where he was housed in a specialised halfway house for liver transplant patients. He returned to Malta on the 21st August 1989 on the following treatment:

Azathioprine 100mg dly	
Cyclosporin A 400mg dly	
Prednisolone 10mg dly	
Zantac 150mg bd	
TXA 2 tabs bd	*-experimental thromboxane antagonist*
Warfarin 3mg dly	*-after the transplant the patient developed pulmonary emboli*
Insulin (Mixtard)	*24U am - 10U pm*

There were no signs of rejection, and blood samples were sent regularly to King's College Hospital for assessment.

See letter from Camberwell Health Authority – figure 2.

Camberwell
HEALTH AUTHORITY · LONDON

King's College Hospital,
Denmark Hill, London SE5 9RS.

Telephone 01-274 6222 ext
Direct Line

LIVER UNIT
DEPARTMENT OF MEDICINE

JGO'G/JLA/D075688

11th December 1989

Dr Peter D Fenech
St. Luke's Hospital
G'Mangia
Malta

Dear Dr Fenech

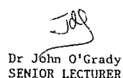
The following are the results of bloods forwarded to us recently:

Haemoglobin	15.8
WCC	12.4
Platelets	259
Sodium	139
Potassium	4.7
Calcium	2.53
Urea	9.8
Creatinine	78
Bilirubin	12
AST	27
Alk Phos	136
Gamma GT	76
Total Protein	74
Albumin	45
Cyclosporin level	305mg/l

COMMENT

Liver graft function is excellent. The Cyclosporin level is above the therapeutic range and if he is absolutely sure that this is a 24 hour trough level then the dose can be reduced to 250mg daily. Otherwise we suggest no change to his treatment. Hope he remains well.

Yours sincerely



Dr John O'Grady
SENIOR LECTURER

He was reviewed at the liver transplant clinic at King's College on the 4th January 1990.

See letter from Camberwell Health Authority – figure 3.

He was soon able to return to his work as an Advertising Manager. However, by mid-March he was suffering from severe back pain with radiation to both lower limbs. Bedrest and analgesics did not control the symptoms, and he was unable to move his lower limbs.

He was again admitted to St. Luke's Hospital, and CAT Scan of the lumbar spine and pelvis showed a large infiltration of the right lateral mass of the sacrum, destroying bone and extending into the spinal canal and adjacent soft tissues. His diabetes was difficult to control, and pethidine was started for the pain. Palliative radiotherapy was also administered to relieve bone pain.

The patient eventually passed away on the 4th of June 1990, one year after his successful liver transplant. Cause of death was primary hepatoma with lumbo-sacral metastases, and diabetes mellitus.

This case struck me because of the sudden onset, and the fact there were no specific etiological factors

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LIVER UNIT
DEPARTMENT OF MEDICINE

JGO'G/JLA/D075688

2nd February 1990

Dr Peter D Fenech
St. Luke's Hospital
G'Mangia
Malta

Dear Dr Fenech

Your patient was reviewed at the liver transplant clinic on the 4th January 1990. He is well apart from pain in the left side of his chest which is worse at night. Physical examination reveals he is obese, weighing 93.6 kg. Blood pressure is 150/70. No other abnormalities were detected.

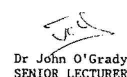
INVESTIGTIONS

Haemoglobin	15.4	Bilirubin	20
WCC	12.5	AST	41
Platelets	323	Alk Phos	148
Sodium	138	Gamma GT	131
Potassium	4.7	Total Protein	71
Urea	10.9	Albumin	43
Creatinine	85		
Random Glucose	17.5	Cyclosporin level	33μg/l

COMMENT

The liver function tests are satisfactory although there has been a slight increase in each of the parameters. This probably reflects the sub-therapeutic Cyclosporin levels and we have increased the dose to 400mg daily. The remainder of the immunosuppression remains unchanged. The random glucose is not suggestive of good diabetic control and we have advised him to increase his insulin. The anticoagulation is now being discontinued. Next planned review is in six months time but will be happy to see him at any stage in the interim should problems arise.

Yours sincerely



Dr John O'Grady
SENIOR LECTURER

for primary hepatoma. It was disappointing that after a successful transplant the patient survived for only one year rather than the average five years, obviously due to metastases. A positive aspect is the success of the half-way house, which is an annex of the main hospital where patients can be monitored as they return to a normal way of life. Hospital doctors are on call 24 hours a day, and see to the patient immediately if the need arises. These half-way houses are now being used in the management of other types of organ transplant cases.