

UK& Eire Liver Transplant meeting

Thurs 9th January 2014

Clare College Cambridge.

Thursday programme - for histopathologists:

Pre 12.30: Arrivals/registration

12:30 Lunch

13.20: Welcome: Paul Gibbs

13.30 Concurrent session 1: Pathology: *Chairs Rebecca Brais and Sue Davies*

Case discussion:

pre-circulated slides and virtual images from
Birmingham (2), Dublin (1), Cambridge (2), Newcastle (2), Leeds (2).

Case histories - *see page 2 below.*

There will also be a presentation from Cambridge on baseline biopsies.

15.30: coffee/tea

16:00 concurrent session 2: Science: *Chairs: Sue davies & Brian Davidson*

16:00 Senescence in transplantation Graeme Alexander, Cambridge

16:25 Tolerance and proposed withdrawal studies Alberto Sanchez-Fueyo, Kings

16:50 Features of long established liver grafts tbc

17:15 Acute antibody mediated rejection Jake Demetris, Pittsburgh.

17:45 close of play

18:30 drinks

19:30 dinner.

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Case histories for circulated slides:

Clinical information for circulated slides: 9 cases.

Slides will also on the Virtualpathology website

http://www.virtualpathology.leeds.ac.uk/eqa/liver_trans.php

Please note there are additional special stains on the website for Birmingham case 1 and for Leeds case 1.

Birmingham Case 1 (2608/12 - block 6) – H&E + Orcein + HVG:

CLINICAL DETAILS:

20 year old female. Transplanted for acute hepatitis with submassive necrosis.

First OLTx failed on day 9, after initial reasonable function, going off on day 5. Failed allograft showed massive haemorrhagic necrosis with extensive hepatic venous and intrasinusoidal platelet rich thrombi and the possibility of a donor specific antibody mediated process was raised, however the C4d was negative and no serum was sent to look for a DSA.

Second transplant had initial dysfunction and showed severe cholestasis with no features of rejection, at approximately 3 weeks she developed rejection with features of antibody mediated rejection and a donor specific antibody was found (This biopsy seen at previous UK and Ireland pathology group meeting (Birmingham B/2011, available at http://www.virtualpathology.leeds.ac.uk/eqa/liver_transplant.php?circ=3). The changes persisted and became more complex with biliary features, vascular features, the development of dissecting zone 3 fibrosis associated with/secondary to persistent sinusoidal inflammation. During this period the DSA titre decreased significantly, but she went on to develop increasing fibrosis. MRCP at 11 months showed a stricture at the biliary anastomosis.

Retransplanted about 14 months after the second transplant. At this stage LFTs: AST 200, alkaline phosphatase 130 and bilirubin 630

MACROSCOPY: Green liver weighing 1164 g. No focal lesions seen. Hilar and hepatic vessels are patent.

Birmingham Case 2 (27144/13) – H&E

CLINICAL DETAILS:

Same patient as above.

Routine follow-up biopsy, 22 months following second re-transplant operation.

Currently well with good graft function.

Persistent mild elevation of Alk Phos (now 115). ALT & bilirubin normal

Dublin

CLINICAL DETAILS:

44 F. Transplant **8 weeks** earlier for acute liver failure as a result of paracetamol overdose. She had a previous post transplant biopsy at day 21 for raised LFTs, which showed mild portal inflammation only, no cellular rejection.

Cambridge 1

CLINICAL DETAILS:

5 months post transplant for NASH and A1AT: CMV treated previously. Now raised ALT.

Cambridge 2

CLINICAL DETAILS:

8mm incidental nodule in explant for HCV cirrhosis

Newcastle 1

CLINICAL DETAILS:

10 M. Transplant July 2011 for biliary cirrhosis, ? underlying cause.

This biopsy is 2y 4 m post transplant. Clinical details = 'post liver transplant. Recent cryptosporidium diarrhoea treated. Abnormal liver function ? rejection.

Newcastle 2

CLINICAL DETAILS:

37 F. Orthotopic liver transplant for ALD in November 2013. Transplant biopsies taken on days 4, 10, 15 and 17. Submitted biopsy from day 15, liver function tests at that time: Bilirubin 127, Alk Phos 472, ALT 192, CRP 70

Leeds 1

CLINICAL DETAILS:

46 F. Three months post transplant for HCV and HCC. Now deranged LFTs.

H&E circulated; please also see additional virtual slides (H&E levels x3, PASD, PAS, sirius red) on website.

Leeds 2

CLINICAL DETAILS:

53 F. Transplant for ALD/HCV (genotype 3a) cirrhosis. DCD transplant. One year pre-transplant, treatment for HCV 1 year but stopped due to decompensation.

Leeds 2a: First biopsy, 2 months 20 days post transplant: Running ALT of 193 ? cause, ? rejection ? hepatitis C. Additional information - MNF stopped 3 days before this biopsy due to neutropenia.

Leeds 2b: Second biopsy, 3 months 5 days post transplant: increased ALT and ALP, Readmitted with pruritis, bilirubin 50 therefore repeat biopsy, ? FCH.

Leeds 2c: Third biopsy, 4 months post transplant: On-going deterioration in LFTs - ? hep C, ? rejection.

JIW 27.12.13