

involved in mechano-transduction. PDLIM5 mRNA expression was confirmed by qPCR, and PDLIM5 protein expression was demonstrated by WB and ICC in both LX-2 cells and primary HSCs. Stimulation of LX-2 cells with TGF $\beta$  (2 ng/ml) for 24 hrs significantly increased expression of enigma proteins. siRNA knock down of PDLIM5 reduced the expression of fibrotic genes including ACTA2, CTGF, and COL1; and was accompanied by increased cytoplasmic localization and phosphorylation (inactivation) of YAP1.

**Conclusion** In brief, our work defined a new mechanism for activation and nuclear translocation of YAP1 in HSCs via the enigma family protein PDLIM5. Understanding hippo independent mechanisms of YAP1 activation in HSCs may reveal novel targets for urgently needed anti-fibrotics.

P3

### PORTO-MESENERIC THROMBOSIS IN A NON-CIRRHOTIC PATIENT WITH SARS-COV-2 INFECTION

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**Introduction** During the coronavirus 2019 (COVID-19) pandemic, it is clear this novel coronavirus generates a markedly hypercoagulable state. Thrombotic events are driven by a severe pro-inflammatory response to COVID-19 as well as hypoxia manifested in severe illness. Whilst the commonest thrombotic events associated with COVID-19 remain pulmonary embolism, myocardial infarction and deep vein thrombosis, intra-abdominal thromboses are less well characterised, but are illustrated in this case.

**Case Presentation** A 42 year-old Eastern European man with chronic hepatitis B (undetectable viral load on Entecavir; eAg negative; sAg positive; alanine transaminase (ALT) 34 IU/l; FibroScan 7.4kPa Nov 2019), and prior trauma-related splenectomy (1998), developed pyrexia and cough on the 23rd March 2020.

His fever resolved on symptom-day 10, following a course of Amoxicillin, then Doxycycline, for presumed bronchitis from his GP. On symptom day 14, he woke with constant non-radiating right hypochondrial pain. The following day he presented to his local hospital and was managed conservatively for suspected biliary colic (no imaging). His bilirubin was 23 $\mu$ mol/l, ALT 55 IU/l, alkaline phosphatase (ALP) 66 IU/l and albumin 31 g/l. Having been discharged with analgesia, he re-presented to his GP with ongoing worsening pain on symptom-day 25. His bilirubin was now 33 $\mu$ mol/l, ALT 31 IU/l, ALP 74 IU/l and albumin 35 g/l. Abdominal ultrasound suggested portal vein thrombosis (PVT) with collateralisation.

He was subsequently admitted by the general surgeons and a CT-abdomen demonstrated loss of enhancement of the entire length of the portal vein and proximal superior mesenteric vein, with expansion and surrounding inflammatory stranding consistent with thrombosis. Concurrent CT-chest demonstrated bilateral patchy ill-defined ground glass opacities with basal predominance, worse on the right, consistent with COVID-19 infection. Whilst his RT-PCR was negative,

subsequent SARS-CoV-2 antibody serology was positive. His thrombophilia screen excluded inherited and acquired thrombophilia such as antiphospholipid syndrome. His repeat triple phase CT-abdomen 6 weeks later, confirmed an established PVT with collateralisation extending into the upper abdomen. Having been commenced on Apixaban 5 mg BD in April 2020, he is currently asymptomatic.

**Discussion** This is one of the first cases of likely COVID-19-related porto-mesenteric thrombosis to be described in the UK. Similar cases have been described in France and Italy in non-cirrhotic patients. With almost a fifth of COVID-19 infections presenting with gastrointestinal symptoms, and a recent meta-analysis suggesting 9.2% developing abdominal pain, our threshold for performing liver ultrasound with doppler assessment must be lower to avoid missing this reversible complication of COVID-19.

P4

### A 21 YEAR REVIEW OF TRANSJUGULAR INTRAHEPATIC PORTOSYSTEMIC SHUNT PLACEMENTS IN UNIVERSITY HOSPITAL OF WALES, CARDIFF

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**Introduction** Decompensated cirrhosis is associated with poor outcomes and the incidence of advanced liver disease has increased in Wales over the last two decades. Transjugular intrahepatic portosystemic shunts (TIPSS) are an effective treatment of recurrent variceal bleeding and refractory ascites.

**Methods** A retrospective casenote review of all successful and unsuccessful TIPSS procedures at University Hospital of Wales. Clinical scores were calculated from bloods at the time of TIPSS placement. These cases were then compared to the 2020 BSG TIPSS guidelines<sup>1</sup> for concordance.

**Results** 93 TIPSS procedures were attempted between March 1999 and June 2020, 85 (91%) of which were successful. The average age was 58 (29–84) and 54 (58%) were male. 72 (77.4%) referrals were from Cardiff and Vale, 19 (20.4%) were from the rest of South Wales, and 2 (2.2%) were from England.

The predominant aetiologies of cirrhosis were alcohol (44%), NASH (23%), viral hepatitis (9%) and PBC (6%).

The main indications for TIPSS were oesophageal (53%) and gastric (11%) variceal bleeding, resistant ascites (24%), stomal variceal bleeding (6%). Of note, a caecal varix was the indication in one case and GAVE was the indication in two cases (a failed TIPSS that was then repeated successfully in the same patient). The average MELD-Na was 14 (6–29). The average post-TIPSS gradient was 8.5 mmHg (2–13). 30-day survival was 93%. Poorer survival was associated with increasing MELD-Na. All 4 patients with MELD-Na >24 died by day 32. There has been an increase in TIPSS procedures from an average of 1 per year between 1999–2004 to 8 per year between 2017–2019. 11 TIPSS procedures were performed in 2019, all successful. 6 successful TIPSS performed in 2020 so far.

**Discussion** TIPSS is an effective therapy in selected cases. The demand for TIPSS is increasing. Formalised referral pathways would improve access across South Wales. In alignment with the 2020 BSG TIPSS guidelines<sup>1</sup> a concordant indication was present in 91/93 (97.8%) of cases.

## REFERENCE

1. Tripathi, D *et al* 2020. Transjugular intrahepatic portosystemic stent-shunt (TIPSS) in the management of portal hypertension. *Gut* 0:1–20

P5

### THREE YEAR FOLLOW-UP EVALUATION OF THE MANAGEMENT OF PRIMARY BILIARY CHOLANGITIS IN ANEURIN BEVAN UNIVERSITY HEALTH BOARD

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**Introduction** In May 2017, a service evaluation of the management of primary biliary cholangitis in Aneurin Bevan University Health Board was performed. The evaluation identified three groups of patients: 1) non-responders to optimal ursodeoxycholic acid (UDCA), 2) patients on sub-optimal UDCA (<15 mg/kg) with persistent alkaline phosphatase (ALP) elevation and 3) patients intolerant of UDCA with persistent ALP elevation. This follow-up evaluation in January 2020 reviews how these patients have been managed since and whether their disease has progressed.

**Methods** Of 112 patients evaluated in 2017, 30 were identified for review of their management. 11, 15, and 4 patients were in groups 1, 2, and 3 respectively.

Clinical letters, weight, medications, and liver biochemistry results of these 30 patients were reviewed again in January 2020. Treatment response to UDCA was assessed using the Toronto criteria (ALP of >1.67 the upper limit of normal). Optimal UDCA therapy was considered to be  $\geq 15$  mg/kg based on most recent patient weight available.

#### Results

UDCA-non-responders (n=11)

3 did not have information available since 2017; 1 since deceased and 2 did not attend follow-up. Of the 8 reviewed 5 now have an ALP <1.67 ULN within the last 12 months. 1 is now on OCA but still has an elevated ALP. 1 has only recently been contacted and started on UDCA. 1 is on an optimal dose of UDCA with an elevated ALP, they could be eligible for OCA. Median UDCA dose was 14.6 mg/kg (12.2–19.3). Median ALP was 187 (96–283).

Sub-optimal UDCA patients (n=15)

2 did not have information available since 2017, both deceased. Of the 13 reviewed, 8 had an ALP <1.67 ULN (all within the last 12 months except 1). 5 still had an elevated

ALP. 2 need an increased dose of UDCA to  $\geq 15$  mg/kg. 2 have been unable to tolerate increased doses of UDCA and could be eligible for OCA. 1 is now on optimal UDCA but still has an elevated ALP and could be suitable for OCA. Median UDCA dose was 13.7 mg/kg (7.3 – 17.9). Median ALP was 200 (8–380).

Patients intolerant to UDCA (n=4)

2 patients have since died, and 1 was discharged due to old age and frailty. 1 patient would be eligible for OCA if pruritus resolves.

**Discussion** Of the 22 patients that were reviewed, 13 now have an ALP <1.67 ULN, 3 need UDCA optimisation, 1 patient is on OCA and 5 further patients could be suitable for OCA.

P6

### FACTORS ASSOCIATED WITH HBSAG-POSITIVE STATUS IN PRIMARY CARE IN ENGLAND: DATA FROM THE OXFORD-ROYAL COLLEGE OF GENERAL PRACTITIONERS RESEARCH (RCGP) AND SURVEILLANCE CENTRE (RSC) NETWORK

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**Introduction** Mapping the epidemiology of HBV infection informs effective control policies. We report the characteristics of the primary care population with recorded HBsAg-positive status across England.

**Methods** We retrieved records from people aged  $\leq 80$  years held by the RCGP RSC, which collects data from >500 GP practices throughout England. Factors associated with a recorded HBsAg positive result were explored by multivariable logistic regression analysis among all patients recorded in the database between Jan 2008 and Jul 2019.

**Results** Among 6,975,119 patients, 8,065 (0.12%) had a recorded HBsAg positive status. HBsAg-positive people had a median age of 44 years (IQR 37–54) and 48% were females. Ethnicity comprised 31% white, 25% Asian, 24% black, and 20% mixed/other. Regional breakdown comprised 46% London, 22% South of England, 19% North of England, and

**Abstract P6 Table 1** Results of literature review and analysis

Paper no.	First author	Year	No. biopsy readings	Average NIA kappa score	Average fibrosis kappa score
1	Goldin, R.	1996	100	0.31	0.76
2	Bedossa, P.	1994	300	0.33	0.78
3	Rammeh, S.	2014	118	0.35	0.86
4	McElroy, M.K.	2011	60	0.57	-
5	Benlloch, S.	2009	122	-	0.75
6	Petz, D.	2003	200	0.29	0.81
7	Westin, J.	1999	285	0.28	0.37
8	Baris, Y.S.	1997	180	0.19	0.31
<i>Analysis of all papers</i>					
<b>Range of NIA kappa scores</b>		0.19-0.57	<b>Range of fibrosis kappa scores</b>		0.31-0.86
<b>Mean NIA kappa score</b>		0.33	<b>Mean fibrosis kappa score</b>		0.66
<b>Weighted mean NIA kappa score</b>		0.30	<b>Weighted mean fibrosis kappa score</b>		0.63