Specialty Corner

HPBASA

Hepato pancreatico biliary imaging

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The HPBASA inaugural meeting

By Prof Steve Beningfield

From Friday 13th to Sunday 15th October this year, the inaugural meeting of the Hepato-Pancreatico-Biliary Association of South African (HPBASA) was held in the Sandton Convention Centre. Organised by Professor Martin Smith and Dr Jose Ramos on behalf of the founding committee, this meeting was decidedly not dominated by any group, but was rather specifically meant as a multidisciplinary gathering of those interested in liver and pancreatic disease.

Radiology was represented by a number of our group, as were radiation oncologists, nuclear medicine physicians, surgeons, physicians, anaesthetists, the medical funders and the ultimate arbiters, the pathologists. Regrettably, one of the liver pathology pioneers, Professor Pauline Hall, was unable to be present.

A number of interesting sessions included discussions on non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH), and the importance in suspecting this condition, particularly before liver resection. Overt steatosis can compromise the residual liver postoperatively, leading to potentially fatal acute liver failure.

Liver biopsy and the current role of cytology were also discussed, with some of the controversy around tumour seeding of the biopsy track debated.

Recurrent acute idiopathic pancreatitis and its investigation came under scrutiny, with the role of endoscopic ultrasound (EUS) and microlithiasis highlighted.

Pancreatic cancer was also examined, including the various chemotherapy and radiotherapy options, but there remains little positive in this condition.

Liver tumours were broadly discussed, and in particular the role that gadobenate in MRI has in resolving focal nodular hyperplasia (FNH) versus adenoma was presented by Martin Haagensen. The thorny issue of an FNH without a scar versus well-differentiated hepatocellular carcinoma (HCC) could possibly be resolved by this agent, using the delayed scans to prove biliary excretion and therefore presumably a functional drainage system. The potential for delayed excretion by the nodular-type cholangiocarcinoma (and possibly HCC) would need to be considered, however.

Therapeutic intervention for HPB malignancy, including cholangiocarcinoma and metastases, was presented by Charles Sanyika. A clear overview of the radiological options in tumor oncology was given, with the relative values of radiofrequency ablation, percutaneous ethanol injection and chemoembolisation debated. The role of radioactive yttrium also has some supporters. The differences in behaviour of the 'African' versus 'Asian' types of HCC still has no clear resolution, but may account for the variation in reported efficacy of chemoembolisation.

EUS is very much the up-and-coming modality, with a number of pivotal roles supported for this technology, but the difficulty in learning the ultrasound component was emphasised.

A thought-provoking presentation on conscious sedation focussed on the dangers of over-sedation for procedures.

Pancreatic and liver cysts were covered, including management of the increasingly diagnosed intraductal papillary mucinous neoplasm (IPMN - previously also called ductectatic mucinous adenocarcinoma). Mucinous cystic neoplasms generally were also addressed by Professor Christos Dervenis from Greece. IPMN, in particular, has experienced a similar rise from obscurity that has been seen with gastrointestinal stromal tumours (GISTs) - the recent upsurge of IPMN has reportedly been labelled 'a plague'.

Fibro-polycystic liver disease (liver or ductal plate malformations) was very well packaged by Prof Alan Paterson from Wits, who drew the audience's attention to a seminal article by Desmet[1] attempting to link together the confusing and apparently discrete entities of the polycystic liver diseases, Caroli's (both the disease and the syndrome - did you know they were different?), plus those little nuisances better known to pathologists, the von Meyenburg complexes. In essence the proposal is that there is either an ectatic or an involutional (or necroinflammatory) process that affects the development of the ductal plate system at various levels of branching. (The ductal plate is an embryological sleeve of periportal tissue that goes on to become the biliary tree). Varying degrees of associated fibrosis occur in either process.
It is broken down thus:

Table I

Biliary branches	Ectasia	Necroinflammatory
Small	Autosomal-dominant polycystic kidney disease (ADPKD) (the old adult type)	von Meyenburg complexes/ 'microhamartomas'
Medium size	Autosomal-recessive polycystic kidney disease (ARPKD) (the old infantile type)	Congenital hepatic fibrosis (CHF)
Central/large ducts	Caroli's disease	Caroli's syndrome (= Caroli's disease plus CHF)
Extrahepatic	Choledochal cyst	Extrahepatic biliary atresia

A useful pictorial review covering the same theme has recently appeared in *Radiographics*.[2]

The Johannesburg transplantation group's activities were thoroughly covered, emphasising some of the particular local financial, political, and ethical issues around liver transplants. The present status of their pancreatic transplantation programme was also covered, detailing the move away from the use of the pancreatic duct-to-bladder implant to gut implantation. Intrahepatic islet cell transplants (injected into the portal vein), the delegates were told, had not shown good long-term results so far. Also, a number of donor pancreases are required to harvest cells for a single patient.

Thrombosis and portal hypertension were also covered from medical, radiological and surgical perspectives. The transjugular intraheptic stent (TIPS) technique has largely moved shunting activity away from surgery, but there was a strong view expressed that surgical shunting may need to be dusted off and re-introduced. Covered TIPS stents appear to offer the promise of longer patency, but there is also work at reducing flow in patients with TIPS who develop problematic hepatic encephalopathy (which can be devastating to personal function).

All in all, this was a very useful forum to gain in-depth insights into the way the other members of a team address the diseases affecting a particular group of organs. There was strong support for making this an annual gathering, and again, with the specific intent of making it as inclusive as possible.

1. Desmet VJ. Congenital diseases of intrahepatic bile ducts: variations on the theme 'ductal plate malformation'. *Hepatology* 1992; **16:**1069-1083
2. Brancatelli G, Federle MP, Vilgrain V, Vullierme MP, Marin D, Lagalla R. Fibropolycystic liver disease: CT and MR imaging findings. *Radiographics* 2005; **25:** 659-670.