The role of multidisciplinary meetings for benign pancreatobiliary diseases: a tertiary centre experience

Noor LH Bekkali[1], Sam Murray[1], Lesley Winter[1], Vinay Sehgal[1], George JM Webster[1], Michael H Chapman[1], Steven Bandula[2], Zahir Amin[2], Samantha Read[2], Stephen P Pereira[1], Gavin J Johnson[1]

1. University College London hospital, department of pancreato-biliary diseases
2. University College London hospital, department of radiology

Corresponding author

Dr Gavin Johnson, MSc MD FRCP

Consultant Gastroenterologist UCLH

UCLH, GI-services

250 Euston Road

NW1 2PG

London

Tel: 020 3456 7890

Fax: 020 3447 9218

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Introduction

Multidisciplinary meetings are central to the management of chronic and complex diseases and they have become widely established across the modern healthcare.1-3 They have been key in providing effective and transparent management decisions via the Cancer Networks and their role is now increasingly being utilised in benign disease. Patients with pancreatobiliary (PB) diseases can often present with complex clinical dilemmas, which fall out with the scope of current guidelines. Therefore these patients require a personalised management approach.

The incidence of many pancreatobiliary disorders is expected to rise as their aetiology is related to obesity and higher alcohol consumption.4 There is also rapidly developing diagnostic and therapeutic procedures for these patients such as advanced endoscopy/ERCP, radio frequency ablation (RFA) and cholangioscopy. These interventions carry significant risks and in the context of benign disease a well-considered management plan previously discussed in a multidisciplinary meeting (MDM) and agreed by all stakeholders is essential. 5-10 The number of patients referred to our MDM has doubled over 5 years' time (figure 1).

In 2014, The British Society of Gastroenterology (BSG) published on the key factors ERCP training and highlighted the importance of 'working efficiently in a multidisciplinary team'. 1 With the increasing incidence of pancreatobiliary diseases, more formalised training programme in medical pancreaticology is needed. A new curriculum was therefore proposed in November 2014 to the Joint Royal Colleges of Physicians Training \board (JRCPTB) and the BSG. 11

Benign pancreatobiliary (PB) diseases

Our unit has had approximately 750 newly referred and 1800 follow-up patients per year in both 2014 and 2015. Many of these patients are discussed in the benign MDT for various conditions; see random 6 weeks' MDM in table 1.

Acute pancreatitis complicated by infected collections, which occurs in 1% of cases, requires discussion by intensivists, radiologists, surgeons and endoscopists to consider the most effective method of drainage to manage sick patients.

Indeterminant biliary strictures in primary sclerosing cholangitis (PSC) or IgG-4 cholangiopathy can be diagnostically challenging and require review with the radiologists, histolopathologists and endoscopists to achieve an agreed diagnosis and intervention.

Lastly, patients with functional disorders such as Sphincter of Oddi dysfunction, require careful discussion and evaluation to decide whether endoscopic interventions are in the patient's best interest considering the associated significant risk of complications. An agreed decision by the whole team can then be explained to the patient with the weight of the expertise behind it.

Table 1. Random case load of benign pancreato-biliary diseases during a consecutive 6 weeks of multidisciplinary meetings.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Acute pancreatitis	2	4	1	1	1	0
Chronic pancreatitis	5	4	2	4	2	0
Strictures (Igg4/PSC)	9	3	10	2	7	4
Cholecystolithiasis	2	5	4	0	3	2
Choledocholithiasis (ERCP/EHL/lithotripsy)	5	3	2	6	6	6
Cystic lesions	4	5	3	4	2	3
Ampullary/ duodenal polyps	1	0	0	0	1	1
Sphincter of Oddi dysfunction	1	1	1	0	0	2
Lap assisted ERCP	1	0	0	0	0	0

The multidisciplinary team

The MDM team in our centre consists of radiologists, gastroenterologists, surgeons, gastroenterology and radiology registrars, a clinical nurse specialist and a histopathologist. (figure 2)

Not surprisingly, a good team climate does translate to better decisions.12 Contrary to previous reports and expectations, more effective decision making is not necessarily associated with the involvement of more opinions from different team members.13 Although each member can bring relevant information, diversity may also bring communication barriers due to difference in knowledge, skills or abilities. To optimise the meeting further, structured communication and focused leadership was shown to be essential.14-15 Last but not least, evidently assembling patient list before meeting and pre-discuss them led to more explicit decision making. 13

The MDM should encourage referrers to attend the meetings in order to help achieve a personalised management decision for the patient. The most senior consultant leads the meeting to ensure a good focus on each case. Before and after the meeting all patients are discussed between consultant/senior fellow and the nurse specialist to confirm how the outcome will be actioned.

The pre- multidisciplinary meeting review

Internal referrals are emailed to the Clinical Nurse Specialist. External referrals are registered by the pathway co-ordinator and any correspondence, relevant imaging and histology gathered. The cases are reviewed prior to the meeting with an aim to limit the

total number to around 30. This leads to a more efficient and effective meeting. The weekly meeting is attended by the PB consultants, HPB surgeons, HPB radiologists and histopathologists. The training doctors and clinical nurse specialist assist in presenting the cases and documenting the MDT's findings and action plans. These outcomes are then uploaded on to the electronic patient record for future reference. Directly after the MDM, the nurse specialist reviews all patients with the consultant in charge to ensure all outcomes are being actioned.

Advantages of a MDM

One of the advantages is providing specialised multidisciplinary services for local and referred patients over a wide geographical area. The number of patients referred to our MDM service doubled over 5 years' time even without the advent of teleconferencing which most likely would further increase referrals. As the MDM takes place on a weekly basis, clinical delay is prevented and this also allows urgent cases (in-patients locally or from other centres) to be discussed. Moreover, it makes it possible for the team to discuss cases and review their images even before seeing the patients in clinic. This consequently leads to a clear plan when the patient is seen in the outpatient clinic. For patients discussed from long distance areas we have the possibility inform them about the outcome via our telephone clinic, which reduces administrative costs and avoids unnecessary patient travelling. Our unit has previously reported excellent patient satisfaction and convenience with our tertiary referral telephone clinic. 16

The other significant advantage of MDT's is the teaching opportunities it provides. The entire process of presenting cases, review radiological images or histology on site and accordingly going through the decision making process and frank exchange of ideas in such an open forum is extremely educational and useful. An internal departmental survey among our junior doctors was very positive with appreciation of improving radiological knowledge and decision making processes.

Disadvantages of a MDM: Workload and Costs

The CNS spends four programme activities / 0.4 FTE (full time equivalents) organising and collecting the patients to the correct MDM date. The PA spends at least two programme activities / 0.2 FTE registering, scanning and requesting lacking images. The consultants spend 0.5 programme activity attending the MDM. As all consultants are expected to attend the meeting as well as HPB radiologists, the CNS and the registrars, it requires a one-day departmental administrator time every week. Unfortunately, there is no guideline to how to financially accommodate or facilitate MDMs in tertiary centres. Current practice is reliant on goodwill and professional duty of care and is not a sustainable solution to the ever increasing workload of MDMs in the long-term.

Future perspective

Tertiary centres providing multidisciplinary meeting services should be funded accordingly to further ameliorate their service such as video conferencing, setting up more research projects, employing more nurse specialists and providing subspecialty curricula to train future subspecialists. This should be prioritised as many specialties including colorectal and pancreatic disease teams have shown better quality and improved patient care following a dedicated MDM plan. 17-18

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