Somerset, Wiltshire, Avon and Gloucestershire (SWAG) Cancer Services

Meeting of the SWAG Network Hepato-Pancreato-Biliary (HPB) Cancer Clinical Advisory Group (CAG)

Friday 27th January 2023

Hotel du Vin, Narrow Lewins Mead, Bristol, BS1 2NU

Chairs: James Skipworth and Stephen Falk

REPORT (To be agreed at the next CAG Meeting)	**ACTIONS**

1. Welcome and Introductions

Please see the separate list of attendees and apologies uploaded on to the SWAG website here.

2. Clinical Updates

2.1 Trans-Arterial Chemoembolization (TACE) for Hepatocellular Carcinoma (HCC)

Please see the presentation uploaded on to the SWAG website

Presented by M Callaway

TACE is now given in a day case session. There is some controversy around who should be treated, as it is for those cases with intermediate disease. The Barcelona Clinical Practice Guidelines state that it should be the approach for treating Stage B, multinodular unresectable tumours with preserved liver function.

It is not a curative therapy. It is increasingly being used as a bridge to transplant rather than ablation.

All cases are reviewed for suitability by the HPB MDT.

Three methods are used:

- Trans-arterial embolization (TAE), the method used at the Royal Free
- Conventional TACE, performed at UHBW
- DEB-TACE (Drug-eluting bead trans-arterial chemoembolization), which is a modern approach.

Current literature suggests that there is no difference in the outcomes from each method.

Details of each method were presented, as documented in the presentation.

Outcome measures from a British Conventional TACE trial give the Bristol team a good basis for comparison. The Bristol method uses Doxorubicin and Lipiodol and then PVA particles are injected until vascular stasis is achieved.

The Bristol Team are the first in the UK to organise performing the procedure as a day case, motivated by the lack of bed space, which has made a significant cost saving of two inpatient stays per patient. Patients are seen in clinic where it is explained that the treatment is not curative; bloods and consent are then taken. A 4 French Catheter System is used which allows the flexibility to provide this as a day case. The nurses contact the patient the next day to undertake a health assessment.

CT follow up is 6 weeks, 3 months, 6 months and 1 year, unless another treatment is required.

The first 100 consecutive patients have been reviewed; the first case was treated on 4th March 2015. Results are documented in the presentation, which show the service to be safe and effective, with an 80% 1 year and 54% 2 year survival rate.

Two groups with a poorer survival rate were identified:

- Tumours ≥10 cm survival is 50% at 11 months and 90% at 17 months
- AFP ≥1000 survival is 50% at 14 months and 80% at 18 months.

In response to the COVID pandemic, a no chemotherapy TAE approach was offered and 18 patients have been treated since. This resulted in a 20% reduction in survival in a very similar patient group.

In conclusion, TACE is a safe service; discussions need to be had with patients with large tumours or high AFP.

This is the first example where a difference in outcomes between TAE and TACE has been demonstrated; the data will be shared. As all procedures are undertaken by the same operator, there is reassurance that the technique will have been consistent.

Discussion:

There was a slightly higher number of larger tumours and higher AFPs in the TAE data, which may have affected outcomes.

A trial of TAE versus TACE was attempted at the Royal Free approximately 10 years ago, but it failed to recruit.

The data will be used to help patient decision making when offering the treatment and help discussions within the MDTM.

Further work will be undertaken to confirm the cause of death in the TAE group of patients. **M Callaway**

2.2 Selective Internal Radiotherapy (SIRT) for HPB Malignancy

Please see the presentation uploaded on to the SWAG website

Presented by S Falk

SIRT was first approved in 2002, and a few cases were undertaken in 2010 before it was decommissioned. It is hoped that UHBW will soon become an accredited centre due to recent changes in the technique and commissioning rules.

The treatment involves interventional radiology to deliver a radiation dose directly to liver tumours. It uses beta radiation, which penetrates a relatively short distance from the blood vessels that it is injected into, and deposits over a period of three weeks.

The technique has improved since 2010 to ensure that the optimal dose is given, which is between 100-120 Gy.

King's College Hospital was visited to observe a case where a hemi-hepatectomy was performed with radiation rather than surgery.

It will complement the list of treatments available for unresectable disease:

- Ionising Radiation
  Catheter directed
    - SIRT
    - Chemo-embolization
    - Chemotherapy
- Percutaneous
    - Cryosurgery
    - Thermal ablation
    - Radiofrequency ablation
    - Microwave.

Until 2021, SIRT was licenced to treat a wide variety of liver tumour types. Following a regulatory review, it was decided that further evidence of the benefit needs to be established with additional randomised controlled trials. It is now commissioned for use only in advanced HCC and colorectal metastases ≥4 in ≤25% of the liver volume, unless in the context of a research trial, for people who cannot tolerate chemotherapy.

The question for the MDT will be which patients to treat with TACE versus SIRT as the mean average survival for these palliative treatments are around the same, as is the progression free survival, response rate, outcomes and quality of life.

It will most likely be recommended for large tumours, multi-nodular tumours, and tumours in the portal vein.

The SARAH RCT trial looked at SIRT versus systemic treatment, which showed very similar overall survival data, but significantly more adverse events in the

Sorafenib arm, which commonly causes diarrhoea, skin rashes and fatigue. Quality of Life data also looks marginally better in the SIRT arm.

When an agent is approved by the British Standards Institution (BSI), which is a radiation source, there are strict quality control measures put in place, which means that the three large SIRT observational studies have large, detailed registry and outcome data. Survival is very consistent between the studies.

SIRT is also being used as a bridge to transplantation.

Further information on additional trial results are within the presentation.

In conclusion the SIRT evidence base requires improvement; it is not usable for colorectal metastases with the current commissioning guidelines but has a definite place for use to treat HCC.

MDT selection will be key and, if commissioned, it will mean that the team will be able to offer every treatment that is available nationally.

Discussion:

It was unclear when the decision about commissioning will be made; it had been expected in September 2022.

An institution licence and an Administration of Radiotherapy Substances Advisory Committee (ARSAC) licence is required before this can progress.

Software for the before and after treatment scans needs to be acquired.

The residual liver function is preserved as the treatment is directly targeted at the tumour alone.

Agreed national criteria on the size that is considered large and eligible for SIRT would be helpful.

The procedure will be performed in radiology.

2.3 Interesting HPB MDT Cases
Presentations are available to MDT members on request

Presented by Dr H Karteszi

Three complex cases have been chosen to share learning from an MDT wide perspective.

Case 1 demonstrated that surveillance of the pancreas using an abbreviated MRI protocol without postcontrast sequences was suboptimal.

Diagnosis of pancreatic cancer was delayed by patient factors when surgery was declined.

According to the ambitious HPB optimal pathway, a jaundice patient should have an urgent CT reported by Day 3 of presentation, but this is not always feasible given existing resources.

The radiological diagnosis was T2 N0M0; it is likely that the tumour was 1.6cm at the time of the previous surveillance scan.

Variation can be common between radiologist assessment of borderline resectable disease, as demonstrated by a study undertaken in the Netherlands.

The surgical procedure was complex and the final pathological Stage was T3 N0 MX R1.

Systemic Anti-Cancer Therapy was offered but declined.

Discussion:

As patients with Intraductal Papillary Mucinous Neoplasms (IPMN) have a 30% chance of pancreatic cancer, these are also being followed up with surveillance after cyst resection; the frequency of follow up needs to be defined.

Recommendation: To improve the quality of surveillance MRI protocols

CAG recommendation

Case 2 demonstrated delays caused by additional Staging investigations prior to surgery after initial diagnoses on CT. The pathway may have been streamlined by avoiding the Endoscopic Ultrasound Scan (EUS).

There were additional delays due to medical reasons.

An updated CT scan was required which was found to be suboptimal.

Surgery was very complex but successful.

Radiological Staging was T1c N0 M0, whereas final pathological Staging was pT1c pN1 R0.

Despite the delays, the final outcome was good.

Case 3 demonstrated an example where Endoscopic Retrograde Cholangiopancreatography (ERCP) was undertaken prior to MDT referral.

Staging showed a tumour that was borderline resectable, being in contact with the inferior vena cava.

Neo-adjuvant SACT FOLFIRINOX resulted in a moderate / marked response and made resection possible. Despite some initial delays and the advanced age of the patient with repeat scans, the final outcome was excellent.

The decision to give FOLFIRINOX to an older patient was made due to the individual's excellent Performance Status. More nuanced indexes of assessing the fitness of patients are required, rather than age restrictions.

The surgical team do not have age restrictions and surgery is undertaken after individualised health assessment.

Action: To undertake and document a frailty assessment for all patients ≥70 with borderline resectable disease. **Lead Consultant**

Assessment prior to surgery includes the anaesthetic risk score, METS factor, sit to stand test, and sometimes CPES.

3. Current Pressures In Primary Care

Please see the presentation uploaded to the SWAG website

Presented by G Beard

Primary Care are contracted to provide Essential Services between 08:00-06:30, Out-of-hours services, Additional services, for example, minor surgery, and Enhanced services, such as vaccination programmes. Primary Care Networks (PCNs) have been established via an enhanced service agreement.

Practices can also opt into other locally commissioned services which may be commissioned by non-NHS organisations such as local authority public health departments.

The service needs to be delivered within a block contract cash equivalent of £93.46 per patient a year, with the left over practice income shared between the practice partners.

For cancer, Primary Care are responsible for maintaining a register of patients with cancer, undertaking cancer care review within 12 months of diagnosis, and offering support within 3 months of diagnosis as per the Quality Outcomes Framework.

The PCN Directly Enhanced service (2022/23) also requires Primary Care to review referral practice, improve uptake of Bowel and Cervical Cancer Screening Programmes, teledermatology, Prostate Cancer Case Finding and Non Site Specific Symptom Service.

The Investment and Impact Fund (IIF) is an incentive scheme that rewards Primary Care Networks for delivering objectives set out in the NHS Long Term Plan and GP contract agreement, which includes increasing the number of lower gastrointestinal two week wait (fast track) cancer referrals accompanied by a faecal immunochemical test result.

There is also the aspirational target to diagnose 75% of cancers early (Stage 1) by 2028.

At present, it is a very challenging time for Primary Care to deliver all these and multiple other targets. There are 1,500 fewer Whole Time Equivalent GPs in post in comparison to 5 years ago. Demographic demand is rapidly increasing as patients are living longer with complex care needs, and there has been a spike in the number of GPs under 30 leaving the NHS. It is for these reasons that patients are finding it difficult to get GP appointments.

Despite this, GP activity has increased and face to face appointments have risen back up to 70%.

To manage the workforce shortage, receptionists have been trained into care navigators so that they can direct the patient to the most appropriate person, and numerous other healthcare roles are being developed and used more efficiently, such as paramedics, pharmacists, physiotherapists, physician associates. This may lead to variation in the quality of referrals received in Secondary Care; numerous educational resources are being made available to try and address this.

HPB CAG can raise any recurring problems arising from HPB referrals **HPB CAG**

Discussion:

It is anticipated that the problems with access to Primary Care will probably decline further before any recovery is achieved.

Patients are more frequently seeking access to private health care.

The number of GP trainees is improving.

The working day for GPs has deteriorated now that there is no dedicated PA time to complete administrative duties, which incentivises GPs to reduce their hours or undertake out of hours services.

Many two week wait referrals are received from GPs which state that it is not possible for them to request CTs.

All GPs in BNSSG have access to request CTs. It is possible to select the urgency of the request via the BRI system. This has to be written in the free text in NBT.

In Somerset, GPs have not been enabled to request CTs.

Action: To remind BNSSG GPs that they have direct access to request CT. **G Beard**

4. HPB MDT Updates

4.1 Tumour Markers Update

Presented by O Clifford-Mobley and E Willis

There is new analytical equipment in the Bristol laboratory that will change the tumour markers assays monitored by the HPB team from July 2023. NBT have already made the changes.

For all of the markers, the lower levels remain very similar. The upper reference limit is the same for CA 19-9. There will be slight changes to the upper reference limit for CEA and AFP, but the normal ranges will be documented on the report.

The main difference is that the very high levels can look quite different, but there is not an exact formula to convert this back to compare with the previous assay.

The main concern had been with monitoring the CEA, but no problems have been identified to date.

HPB CAG are to make contact in the event of any concerns:

Oliver Clifford-Mobley Oliver.Clifford-Mobley@uhbw.nhs.uk

Eloise Willis Eloise.Willis@uhbw.nhs.uk

Discussion:

Post pancreatic surgery, decisions on drain removal are made based on amylase measurements. There are occasions when results come back from the laboratory in an appropriate way, and other times when results repeatedly come back as 'haemolysed, no result'.

It is understood that once a sample is haemolysed, there is concern that the value could be skewed and therefore it is not reported, but the surgical team still need to see this value so that they can remove the drain if the value is low. The accuracy of a high result is less important.

Delayed removal of drains can delay progressing the patient's care, and there is a higher risk of complications, such as a leaking anastomosis, the longer that drains are left in place.

A process needs to be put in place to routinely get the result and mitigate the need to repeatedly call the laboratory to explain why this is required. The result is requested on Day 1,3 and 5, which can result in multiple phone calls.

Action: O Clifford-Mobley and E Willis will relay this message to the laboratory team. **O Clifford-Mobley/E Willis**

4.2 HPB MDT Audits & Survey

Presentations are available to MDT members on request

Presented by Mr J Skipworth and H Dunderdale

A number of different initiatives have been undertaken to assess the MDT meeting. Changes have since been made, and the meeting is now being reassessed to identify if further improvements can be made.

The anonymous survey, first distributed in March 2022, had been repeated in January 2023. A comparison of the results showed that the new MDT referral proforma had grown in popularity to almost 90%. There were fewer comments about preferring to write a letter.

Staff shortages in palliative medicine had been highlighted throughout.

The new extended length of the MDT had also become more popular, now with 78% of attendees feeling it was about the right length.

It was appreciated that splitting the meeting by anatomical site rather than geographical area has lengthened the attendance of those from the peripheral centres.

The answer to the time allocated for preparing cases for discussion had improved from 59% to 71%, but there are still members of the team who require more preparation time.

Recommendation: HPB CAG support anyone who needs to make this case to local managers. **HPB CAG Recommendation**

The time spent reviewing radiology scored very positively, as did the section on pathology.

Action: There are ongoing issues with image transfer which need to be raised again. **H Dunderdale**

The split by anatomical site has helped pathology manage their workload.

There could be further improvement about the time allocate to discuss patient preferences. Although this seems to have improved since the March survey, it is felt to be adversely affected when attendance from local centres is not possible.

Patient experiences are also not represented for Upper GI Cancers in the National Patient Experience Survey due to the low number of responses.

Referrals for EUS and pancreatic cysts are felt to be appropriate to protocolise straight to a standardised treatment pathway.

The question 'Does everyone feel able to contribute / feel valued' has improved and is going in the right direction.

There were comments that it is often difficult for some to contribute, which can also be affected by the hybrid format.

In conclusion, the majority of feedback is generally positive and seemed to be improving. HPB surgeons attending local MDT meetings has helped.

It would be ideal if the palliative medicine team and local teams had the resources to enable attendance, and if the MDT could further improve documentation of outcomes, increase time per patient discussion by protocolising certain patients, increasing preparation time, discussion of patient preferences and wider team contributions.

Action: To add patient preference box to the MDT proforma

Action: To implement use of the direct to EUS referral proforma

Action: To define MDT core mailing list to reduce emails sent to all

Action: To discuss the shortage of palliative medicine resources further outside the meeting today — **J Skipworth/MDT members**

4.3 MDT Mode Assessments

Presented by H Dunderdale

In 2019, as part of the regional plan to look at MDT reforms, Behavioural Scientist T Soukup and Urologist B Lamb were invited to share findings from their PhD on MDT meeting improvements.

The resources that they developed are available on the SWAG website: Clinical Advisory Group Documents - SWAG Cancer Alliance

This includes information on MDT-Mode, a peer review validated tool for measuring the quality of decision making within the MDT meeting environment; training on use of the tool was provided to 30 MDT members across SWAG in 2019, although it is a labour-intensive process and has subsequently been completed mostly by the CAG Service Team.

A baseline assessment is undertaken and fed back for the team to consider any areas where improvements may be made. Once any changes/interventions have

been put in place, the audit cycle is repeated. In T Soukup and B Lamb's experience, an audit cycle may need to be repeated 2-3 times over the course of several years before a meeting can be completely optimised.

The HPB MDTM Baseline Assessments took place on 24th January 2020 and 31st January 2020. A total of 128 patients were discussed across the 2 meetings with 60 and 68 discussed within each meeting respectively.

The average discussion time per patient was 1.29 minutes with a minimum of 20 seconds, and a maximum of 10 minutes per patient. This was the lowest average discussion time in comparison with all other MDTMs assessed to date.

There was noted to be a lot of noise from the meeting room next door and attendees talked at a fast pace that accelerated towards the end of the meeting. A total of 11 (9%) cases were deferred for discussion at a future meeting.

The Follow up Assessments took place following the change of venue and duration, on 9th December 2022, 16th December 2022 and 23rd December 2022. A total of 140 patients were discussed across the 3 meetings with 52, 42 and 46 discussed within each meeting respectively.

Average discussion time per patient was 2.22 minutes with a minimum of 20 seconds, and a maximum of 8 minutes per patient. A total of 17 (12%) cases were deferred for discussion at a future meeting.

When comparing the results, reasons for missing information were similar, such as poor-quality images, images not being imported, or pathology not being available.

There has been a significant increase in the information available on comorbidities in 2022. There has also been a significant increase in contributions from the nursing team which was most likely the reason for the increase in patient centred information.

Overall, results showed that increasing the average length of discussion time per patient had improved the quality of MDT meeting information and participant contributions. It is hoped that this evidence can be used to support further MDT reforms, such as job planned preparation time.

Best practice had been identified that could be shared with other MDTMs.

The MDT will be re-assessed once any additional interventions have been imbedded.

The prolonged length of meetings has been proven to reduce quality of decision making, particularly after the first hour, or discussion of 20 patients.

The addition of a break at this point has been shown to balance the quality of decision making and reduce the overall length of the meeting

Published proof: https://bmjopen.bmj.com/content/9/5/e027303

Discussion:

The focus will be on safely reducing the number of case discussions, including repetitions due to deferrals for imaging etc, to further increase average case discussion time.

4.4 Senior House Officer HPB MDT Audit

The aim was to assess the amount of work processed via HPB MDT including re-discussion rate as a marker of MDT efficiency and early data on the effects of recent MDT process interventions.

All patient discussions were reviewed from weekly logs between July 2021 to April 2022. 1651 patients were discussed, 642 liver and 1009 pancreas/biliary.

Re-discussion occurred in 62% of liver cases and 57.5% of pancreas/biliary cases, many of which will have been appropriate, as often two discussions are required. It would be useful to collect the reasons for re-discussion, although the data so far does demonstrate the workload of the MDT.

At present, the data would seem to indicate that there is a reduction in case discussions over the time period, but the audit needs to be extended before this can be concluded.

Discussion:

It would be helpful to look at the MDT discussions in comparison with the HPB best practice timed pathway.

Ideally there would be a mechanism to contact the Consultant of a patient who is listed for re-discussion to see if everything required is now available. This is achieved by the Gynae and Lung MDT Leads, both of whom have job planned preparation time to triage the MDT list; it is not possible for the HPB MDT Lead to be available to do this at present.

4.5 HPB MDT Quality Performance Indicators (QPIs)

Presented by Dr H Karteszi

England has one of the worst five-year survival rates for pancreatic cancer in the world, ranking 28th of 36 countries with comparable data, as reported in the CONCORD-3 trial. 5-year survival for liver cancer is similarly ranked.

Most centres in the UK need to rethink and change practice to improve results; baseline performance needs to be measured first using QPIs to direct where service improvements are required. The Scottish Cancer Board have developed a relevant list that is used to assess all cancers, as documented in the presentation, and the European Union has developed alternative guidance.

UHBW plan to measure performance as part of an audit or as part of a Quality Improvement project.

Each indicator should be an evidence based easily measurable area of clinical importance that impacts quality of care and is able to be monitored over time.

HPB CAG are invited to form a QPI development group, which should ideally comprise 3-4 members to identify the most relevant local QPIs and how this will be collected, reviewed and published.

The quality outcomes for HPB patients are dependent on numerous healthcare professionals and effective communication between the MDTs; all of which may need to adapt elements of their practice.

For radiology, accurate radiological staging is a key part of the pathway for which high quality imaging is required, and so use of appropriate scanning protocols

could be a regional QPI. Another QPI could be assessment of the use of the pancreatic cancer reporting template which, although this takes some time to complete, is recommend by all published guidelines.

HCC screening is well established and already audited, but screening various groups for pancreatic cancer could be established with a database of relevant patients, as could assessing performance based on the SWAG HPB Best Practice pathway.

The HPB proformas could be assessed to measure if all of the requisite information has been provided.

QPIs relating to MDT meeting performance could be included, such as the number of patient discussions before a decision has been made and the number of patients deferred to the next meeting due to missing information.

Additional suggestions for QPIs relating to surgery, endoscopy, pathology and supportive care are documented in the presentation.

A mandatory national pancreatic surgery database will commence next year.

There are clear guidelines on expected pathology turnaround times which have been particularly hard for pathology to meet during this challenging time.

J Skipworth and H Karteszi will email a request for volunteers for the QPI Development Group, which will ensure that all elements of care will have a target for improvement and outcomes will be measured — **J Skipworth/H Karteszi**

Discussion:

If a pancreatic cancer with no metastases is found locally, a direct referral for a staging scan should be triggered with the Bristol team, as these are the patients who require high-quality pancreas protocol images.

When a re-staging scan is requested locally post neo-adjuvant/adjuvant treatment, pancreas protocol imaging should be undertaken in the local centre rather than a routine CT chest/abdo/pelvis.

5. Research

5.1 West of England Clinical Research Network update

Please see the presentation uploaded on to the SWAG website

Presented by C Matthews

Research Delivery Manager C Matthews manages the cancer portfolio for West of England CRN.

National clinical trial recruitment from April 2022- January 2023 shows that 6,007 patients have been recruited to Upper GI as a whole, which has dropped in numbers in comparison with the previous year's target, although there are a high number of studies open.
A comparison between national and regional recruitment levels shows West of England recruitment performing well in 2023.

There are 21 open Upper GI cancer trials across the SWAG region and, although quite a few are highlighted as not recruiting to time and target at present, there has still been significant recruitment activity.

HPB CAG are to provide feedback to the CRN if any specific barriers to recruitment have been identified so that this can be raised with the study teams; it could be possible to shift timelines or make relevant amendments to the study protocol.

All centres are noted to be actively participating in research. The Checkpoint Inhibitor-Induced Liver Injury study in YDH was noted to be recruiting particularly well.

Two trials are in set-up in the region: EvIHDence in UHBW and Salisbury, and MAP – v2 in YDH.

Another trial is in set-up nationally that says it is open to new sites – BBC - although this has been in set up since 2019.

NIHR website links and team contact details are available within the presentation.

Discussion:

Genomic advances have been made this year for Cholangiocarcinoma and Biliary Tree tumours. There is now an effective drug for patients with FGFR gene alterations.

All RNA indications are now being tested and there is also interest in looking into markers for IDH mutated tumours. These are quite significant advances in what is a rare patient group. The oncologists will be responsible for requesting the tests.

Following results from the GLOW trial, to which UHBW recruited participants, it is expected that testing for CLDN18.2 will be added to the National Test Directory for OG cancer in the near future, as will other indications.

It had been the vision to test all patients for NTRK, although it is very rare, but this is not being achieved across England at present.

National Genomic Test Directory: NHS England » National genomic test directory

6. Any Other Business

Consultant Oncologist S Falk is retiring and then returning to work but will not be available in April. Cover for all clinics has been arranged. The one gap is colorectal representation for the liver MDT. Although this is not standard across the country, it helps with the sequencing of treatment, and a plan is in place to try and bridge this gap.

Date of next meeting: To be agreed by Doodle Poll in the next 6 months