Operational Policy for the Care of patients with suspected Neurological malignancy

South East London Cancer Network and Kent and Medway Cancer Network

OPERATIONAL POLICY 2008

Agreed By:

Mr. K. Ashkan (Lead Clinician Neuro-oncology, KCH) on behalf of the neuro-oncology MDT and the Cancer Networks

Date: 9th December 2008
King’s College Hospital
NHS Foundation Trust

(Joint) Cancer Centre
Operational Policy for the Care of patients with suspected neurological malignancy

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1.0 Introduction

Specialist neuro-oncology surgery has been a key service provided by the department of neurosurgery at Kings College Hospital (KCH) ever since its establishment in 1995 following the merger of the neurosciences units at the Brook and Maudsley Hospitals. Prior to the merger, high quality neuro-oncology service was a well-recognised feature of both the latter hospitals. Kings College Hospital is part of the Joint Cancer Centre in partnership with Guy’s and St Thomas’s Hospital (GSTT).

The implementation of Improving Outcomes Guidance for People with brain tumours and other CNS tumours is progressing in line with the local network agreed action plan (standards to be issued).

Consultant neurosurgeons work in partnership with a comprehensive multi-disciplinary team (as defined by Improving Outcomes Guidance). The infrastructure within which the neuro-oncology service is provided includes 63 neurosurgical adult and 10 paediatric ward beds, a 12-beded neurosurgical high dependency unit and three operating theatres equipped with neuro-navigational, image guidance and stereotactic equipments necessary for optimal neuro-oncological surgery. Extensive neuroradiology services and expertise are available on site including two 1.5 Tesla MRI scanners and dedicated CT scanner for neurosurgery. The oncology services are located at the closely linked Guys and St. Thomas’s and Maidstone Hospitals. The Trust’s commitment to the ongoing growth and development of neuro-oncology services has been demonstrated by the recent employment of further neurosurgeons with subspecialty interest in neuro-oncology; set up of the teleconferencing facilities allowing three way live discussion of the MDT’s patients between Kings, St. Thomas’s and Maidstone Hospitals; investment in stereotactic and surgical equipments; and the potential plans for purchase of an intra-operative scanner.

Our vision is to work with local clinical teams to support local diagnosis and care, through providing ready access to the very highest level of clinical expertise and quality. We believe that patient care should be delivered locally wherever possible and we are working with our partners in South East London Cancer Network, Kent and Medway Cancer Network to further establish the communication, technology and outreach services that will enable us to minimise journeys to the centre and maximise use of local resources.

King’s is committed to improving patients’ experiences of care and providing the highest quality, personalised support to patients and their families (3.8 million catchment area). Experienced Clinical Nurse Specialists are central to the MDT and the holistic care of our patients. There is a separate MDT for Paediatrics and young adults, supported by an Oncologist from the Royal Marsden Hospital with dedicated sessions. Kings maintains close links with the Royal Marsden Hospital. We have an ongoing service development strategy that includes gathering feedback from patients on all aspects of their journeys through our care. For outpatient attendances and inpatient admission, King’s is compliant with all cancer waiting time targets.

Children and Young Persons will be managed according to the South London and Kent and Medway Children and Young Persons pathway.
The Children and Young Persons neurosurgery and in-patient care is compliant with the South London and Kent and Medway age appropriate pathway.
2.0 Neuro-oncology Catchments Population and Activity

King’s College Hospital serves a large geographical area for its neuro-oncology services, including the natural catchment area of south London and Kent. A significant volume of work is also received from the rest of London and across the country.

For Neuro-oncology in particular, the service currently receives referrals from:

South East London Cancer Network:
- Guy’s and St Thomas’ NHS Foundation Trust – local MDM
- Bromley Hospitals NHS Trust, Princess Royal University Hospital – local neurology MDM
- Queen Elizabeth Hospital, Woolwich
- Queen Mary’s Hospital, Sidcup – local MDM
- University Hospital Lewisham
- Royal Marsden Hospital (paediatrics and young adults)

Kent and Medway Cancer Network:
- Medway Foundation NHS Trust, Medway Maritime Hospital
- Dartford and Gravesham NHS Trust, Darent Valley Hospital
- East Kent University Hospitals NHS Trust:
  - Queen Elizabeth the Queen Mother Hospital
  - William Harvey Hospital – local MDM
  - Kent and Canterbury Hospital
- Maidstone & Tunbridge Wells NHS Trust
- Kent and Sussex Hospital
- Maidstone Hospital – local MDM

Surgery rates for Neuro-oncology vary, although the national figure is suggested as being in the region of 10-15%. The King’s neuro-oncology team expects to carry out over 380 surgical procedures this year and these numbers are growing.

*Fig 1: Neuro-oncology surgical procedures undertaken by the King’s team in the last 5 years.*

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<tr>
<th>Year</th>
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<td>348</td>
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<tr>
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**Catchments Population** King’s is the referral centre for neuro-oncology for the South East London Cancer Network (SELCN) (population of 1.5 million 2003) and the Kent and Medway Cancer Network (KMCN: population 1.8 million (1.6million excluding East Sussex) 2006). We also take a proportion of patients from South West London.
3.0 MDT Structure

Core team members or their cover attend the meeting on a weekly basis. Weekly MDT attendance is recorded. (2F-211) The MDM has identified representation at the Tumour Working Group (TWG). (2F-207). In addition, the specialist MDT welcomes attendance from the unit hospitals although it is recognized that it is not possible for them to attend every week. However, video-conferencing is available to enable this to happen.

3.1 Core Team Members

<table>
<thead>
<tr>
<th>Surgical Team Lead and Cover arrangements</th>
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<tbody>
<tr>
<td>Mr K Ashkan</td>
</tr>
<tr>
<td>Email- <a href="mailto:keyoumars.ashkan@kch.nhs.uk">keyoumars.ashkan@kch.nhs.uk</a></td>
</tr>
<tr>
<td>020 3299 3285</td>
</tr>
<tr>
<td>Lead Clinician for neuro-oncology and consultant neurosurgeon with subspecialty interest in neuro-oncology</td>
</tr>
<tr>
<td>COVER – Mr. Ashkan’s specialist registrar</td>
</tr>
<tr>
<td>Mr. R Gullan</td>
</tr>
<tr>
<td>Email- <a href="mailto:richard.gullan@kch.nhs.uk">richard.gullan@kch.nhs.uk</a></td>
</tr>
<tr>
<td>020 3299 4863</td>
</tr>
<tr>
<td>Consultant neurosurgeon with subspecialty interest in neuro-oncology</td>
</tr>
<tr>
<td>COVER – Mr. Gullan’s specialist registrar</td>
</tr>
<tr>
<td>Mr C Chandler</td>
</tr>
<tr>
<td>Email- <a href="mailto:chris.chandler@kch.nhs.uk">chris.chandler@kch.nhs.uk</a></td>
</tr>
<tr>
<td>020 3299 3020</td>
</tr>
<tr>
<td>Consultant neurosurgeon with subspecialty interest in paediatric neuro-oncology</td>
</tr>
<tr>
<td>COVER – Mr. Chandler’s specialist registrar</td>
</tr>
<tr>
<td>Mr R Bhangoo</td>
</tr>
<tr>
<td>Email- <a href="mailto:Ranj.bhangoo@kch.nhs.uk">Ranj.bhangoo@kch.nhs.uk</a></td>
</tr>
<tr>
<td>Consultant Neurosurgeon with subspecialty interest in Neuro-Oncology</td>
</tr>
<tr>
<td>COVER – Mr. Bhangoo’s specialist registrar</td>
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<tr>
<td>NOTE: Neuro-surgical SpR on Call contact Mobile 07747 562 094</td>
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<th>Radiologists – Lead and Cover arrangements</th>
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<tr>
<td>Dr T Hampton</td>
</tr>
<tr>
<td>Email- <a href="mailto:timothy.hampton@kch.nhs.uk">timothy.hampton@kch.nhs.uk</a></td>
</tr>
<tr>
<td>020 3299 4890</td>
</tr>
<tr>
<td>Consultant neuro-radiologist, Lead, KCH</td>
</tr>
<tr>
<td>COVER – Dr N Sibtain (Consultant neuro-radiologist)</td>
</tr>
<tr>
<td>Email- <a href="mailto:naomi.sibtain@kch.nhs.uk">naomi.sibtain@kch.nhs.uk</a></td>
</tr>
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<tr>
<td>Dr R Beaney</td>
</tr>
<tr>
<td>Email- <a href="mailto:ronald.beaney@gstt.nhs.uk">ronald.beaney@gstt.nhs.uk</a></td>
</tr>
<tr>
<td>Consultant neuro-oncologist, GST</td>
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<tr>
<td>COVER – SpR Neuro-oncology</td>
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<td><strong>Neuro-oncology Consultants</strong></td>
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<tr>
<td>Dr G Sadler</td>
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<td>Dr L Brazil</td>
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**COVER – Dr SpR Neuro-oncology**

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<td>Dr L Brazil</td>
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<tr>
<td>Dr S Al-Sarraj</td>
<td>Consultant neuro-pathologist and Lead, KCH</td>
</tr>
<tr>
<td>Dr I Bodi</td>
<td>Consultant neuro-pathologist</td>
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<tr>
<td>Dr A King</td>
<td>Consultant Neuro-Pathologist</td>
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<th><strong>Neuro-Psychologist Lead and Cover Arrangements</strong></th>
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<tr>
<td>Dr A Costello</td>
<td>Clinical Nurse Specialist Neuro-oncology KCH</td>
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**Clinical Nurse Specialist Neuro-oncology KCH Lead for Service User & Carer Issues**

<table>
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<tr>
<th><strong>Clinical Nursing Team</strong></th>
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<tr>
<td>Ms R MacArthur</td>
<td>Clinical Nurse Specialist Neuro-oncology KCH/GSTT</td>
</tr>
<tr>
<td>Ms V Hurwitz</td>
<td>Clinical Nurse Specialist Neuro-oncology KCH/GSTT</td>
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**Palliative Care**

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<th><strong>Palliative Care Team</strong></th>
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<tbody>
<tr>
<td>Dr R Burman</td>
<td>Consultant, Palliative Care, KCH</td>
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**COVER – SPR Palliative care**

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<tr>
<td>Occupational Therapy</td>
<td>020 3299 2338</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>020 3299 2724</td>
</tr>
<tr>
<td>Speech and Language Therapy</td>
<td>020 3299 4665/1809</td>
</tr>
</tbody>
</table>
**MDT Coordinator**

Ms Maureen Shand  
neuro-oncology@kch.nhs.uk  
020 3299 4151  
Neuro-Oncology Co-ordinator – Kings College Hospital

**COVER** – Member of Cancer Data Team

**MDT secretary**  
Provided by Kings Clinical Nurse Specialists

3.2 Extended Team Members

**Surgical Team**

<table>
<thead>
<tr>
<th>Name</th>
<th>Email/Phone</th>
<th>Position</th>
</tr>
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<tbody>
<tr>
<td>Mr P Bullock</td>
<td><a href="mailto:peter.bullock@kch.nhs.uk">peter.bullock@kch.nhs.uk</a> 020 3299 3284</td>
<td>Consultant neurosurgeon with subspecialty interest in pituitary tumours</td>
</tr>
<tr>
<td>Mr N Thomas</td>
<td><a href="mailto:nick.thomas@kch.nhs.uk">nick.thomas@kch.nhs.uk</a> 020 3299 3289</td>
<td>Consultant neurosurgeon with subspecialty interest in base of skull and pituitary tumours</td>
</tr>
<tr>
<td>Mr R Selway</td>
<td><a href="mailto:richard.selway@kch.nhs.uk">richard.selway@kch.nhs.uk</a> 020 3299 3285</td>
<td>Consultant neurosurgeon with subspecialty interest in epilepsy surgery</td>
</tr>
<tr>
<td>Mr D Walsh</td>
<td><a href="mailto:daniel.walsh@kch.nhs.uk">daniel.walsh@kch.nhs.uk</a> 020 3299 4196</td>
<td>Consultant neurosurgeon</td>
</tr>
<tr>
<td>Mr S Bassi</td>
<td><a href="mailto:sanj.bassi@kch.nhs.uk">sanj.bassi@kch.nhs.uk</a> 020 3299 5155</td>
<td>Consultant neurosurgeon</td>
</tr>
<tr>
<td>Mr C Tolias</td>
<td><a href="mailto:christos.tolias@kch.nhs.uk">christos.tolias@kch.nhs.uk</a> 020 3299 3282</td>
<td>Consultant neurosurgeon</td>
</tr>
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4.0 The MDT Meeting

4.1 Weekly Specialist Neuro-oncology MDT meeting
The neuro-oncology MDT meets weekly to ensure all patients are discussed contemporaneously and is held on Friday afternoons at 1 pm in Belgrave MDM Room, Ground Floor, Hambledon Wing at King's College Hospital. The room is equipped with teleconferencing facilities to allow live discussion of patients between Kings, Guys and St Thomas's and Maidstone Hospitals. All core members or their cover, attend each meeting.

4.2 Role of the MDT meeting
- To identify and review all patients with neurological tumours within the supra-regional network, ensuring rapid and equal access
- To confirm diagnosis and stage of the disease
- To decide on the appropriateness of further investigations and staging
- Assess suitability and surgical approach to the tumours
- Plan treatment
- Referral for palliative care in advanced disease
- To ensure proper documentation of all patient in notes and database
- To ensure decision made are communicated to General Practitioners and referring consultants
- Discuss post operative patients to correlate radiology and histology and to decide on further management including radiotherapy, chemotherapy or further surgery
- To discuss management of patients with recurrent disease
- To ensure feedback to referrers regarding the appropriateness of referral in line with agreed guidelines
- To assess therapy needs of patients

4.3 Access to the MDT meeting
All patients with suspected neurological tumours should be referred to and discussed at the specialist neuro-oncology MDT meeting. The referral should be made using the standard proforma (Appendix 1) which is emailed/ faxed to the Clinical Nurse Specialist/MDT co-ordinator. Emails and contact details of the Clinical Nurse Specialist/MDT co-ordinator are made available to the all referring teams (SE London and Kent and Medway Cancer Network). All referral details are documented and later filed in the case notes. It is acknowledged that there may not be a King's case notes at this stage of referral. These patients are discussed in the next MDT meeting to formulate a management plan. For some patients it may not be appropriate to travel to the specialist centre as there may be clear contraindications to surgery due to co-morbidity or widespread metastatic disease (Refer to referral guidelines). The details of such patients and the proposed MDT treatment plan (palliative care, chemotherapy) will still be collected and entered in the data base for audit purposes. The referrers are welcome to attend meetings. Video-conferencing is used.

All patients to be discussed must be referred to the MDT co-ordinator by 12 noon Wednesday for the complete list to be circulated to the Core MDT by midday Thursday for the Friday meeting. Scans must be sent via imagemlink and if this is not available then a CD (Dicom) of scans need to be sent to the MDT co-ordinator. It is the responsibility of the referring consultant to ensure that the relevant radiology is available.
The agreed management plan for each patient is documented using the standard proforma (Appendix) during the meeting on the Neuro-oncology database and minuted by the MDT secretary.

Recorded outcomes are circulated to each member of the team, with a copy of each individual patient’s outcome placed in their notes. Referring consultant and GP will be notified within 24 hours.

4.3.1 Intra-hospital Referrals:
All patients admitted to King’s College Hospital with a suspected or confirmed diagnosis of neurological tumours should have already been discussed in the previous MDT meeting. It is however recognised that there will be times when a patient may be admitted and/or operated without previous discussion in the MDT meeting, primarily because of the clinical urgency of the case. In all such situations, the patients should still be discussed in the following MDT meeting in order to formulate further management plan. A member of the admitting neurosurgical team should be present at the MDT meeting to present the clinical details and feed back the recommendations.

4.3.2 Patient Booking
Once the neuro-oncology MDT has decided that neurosurgical input is required for management of a patient, depending on urgency of the case, patient may either require admission/transfer to the Kings College Hospital site or may be booked into the neuro-oncology clinic.

For those patients requiring admission, the neuro-oncology CNS will liaise with the surgical team and the bed manager regarding a suitable date. Patients with less urgent needs are seen in the next neuro-oncology clinic which is held on the Kings College Hospital site and runs on the 2nd and 4th Monday afternoon of each month. All information/arrangements are fed back to the referring team by the neuro-oncology CNS.

Where a patient is reviewed a second or subsequent time by the MDT a new form will be generated and treated as above.

See Appendix for contact details

Radiology must be sent on image-link or a CD, rather than via email. These can then be viewed and discussed at the MDT meeting for specialist opinion. Local hospital PACS systems cannot be shown in the MDT meeting room.

For urgent transfer/admission requests:

Complete Neuro-Oncology Referral Proforma and contact Neurosurgical Registrar at Kings College Hospital on mobile 07747 562 094 or page KH0777 (via switchboard) to arrange physical transfer/admission.

Generally there is no waiting time and patients are discussed at the next meeting following receipt of their referral. As part of the Neuro-oncology Cancer Centre developments we have an established referral proforma and guidelines which sets out required referral information. We ask always to be advised of existing diagnostic
tests and staging so patients are not subject to repeat tests unless clinically indicated.

All patients with a suspected or confirmed neurological malignancy (Brain or CNS tumours) should be notified to the specialist team. The team will agree the treatment options for each patient. The team may also discuss patients diagnosed outside of the Cancer Centre where the agreed management plan may be for the unit to continue the care. All patients will have a referral form filled in by the referring local team and a record of the MDT discussion will be kept. These forms will be subject to audit on an annual basis.

*In urgent circumstances, clinical decisions may need to be made outside of the MDT meetings. In such cases, the consultant in charge of the patient will initiate or refer for treatment without delay and the management plan will be presented at the next MDT.*

4.4 Structure of the MDT Meeting

The Lead Clinician is the chairperson of the MDT meeting who has responsibility for making sure that the meeting runs efficiently and that the appropriate conclusions of each case are summarised so that they can be recorded by the MDT co-ordinator.

All cases are presented and must include name, age, presenting symptoms, co-morbidities, base line level of daily activities and quality of life, current medications, findings on examination (general and neurological) and all pre-operative/ staging investigations. Radiology and pathology is presented by appropriate members of the team

4.5 Responsibilities of Neuro-oncology Lead Clinician

The principal responsibilities of this role is to ensure high quality services and clinical management for all patients suspect of having a neurological malignancy, in line with the objectives as laid out in the Manual of Cancer Service Standards and as documented in the Trust MDT role description and confirmed in the letter from the Trust Lead Cancer Clinician to the neuro-oncology MDT lead

That is:

- To ensure that designated specialists work effectively together in teams such that decisions regarding all aspects of diagnosis, treatment and care of individual patients and decisions regarding the team’s operational policies are multidisciplinary decisions.
- To ensure that care is given according to recognised guidelines (including guidelines for onward referrals) with appropriate information being collected to inform clinical decision-making and to support clinical governance/audit.
- To ensure that mechanisms are in place to support entry of eligible patients into clinical trials, subject to patients giving fully informed consent.
- To ensure that the MDT Co-ordinator will ensure that minimum data is collected as per the national cancer dataset.

4.6 Attendance at MDT meetings:

Core members must attend 75% of all MDT meetings each year. Attendance at the meetings is recorded by the MDT co-ordinator and is reviewed by the lead clinician on an annual basis.
4.7 Relationship of the Specialist MDT to the Diagnostic MDTs

4.7.1 Kings College Hospital
Neurosurgery for patients with neurological tumours and the immediate post-operative care is performed at King’s College Hospital site. These patients are all discussed at the specialist KCH MDT meeting. However, the MDT also performs the important function of dealing with neuro-oncology cases that are inoperable for reasons such as multiple metastases, severe co morbidity, and those referred for palliation.

Local Network MDT meetings are being developed.

4.7.2 Other Network Relationships
The MDT will work with its partners (Guys and St Thomas’ and Maidstone Hospitals) as well as the local hospitals in the catchment area.

Patients requiring chemotherapy and radiotherapy will be given treatment as close to home as possible at the nearest local unit. The treatment will be given under the guidance of local chemotherapy and radiotherapy protocols.

4.7.3 Annual Review
The neuro-oncology specialist team will meet at least annually with all referring teams to discuss the operational policy (including referral and treatment guidelines), radiotherapy, chemotherapy and to perform a collaborative audit of all patients referred.

The specialist team is continuously working to improve communication with all referring hospitals.

4.8 Attendance at South East London Cancer Network Meetings
There will be representation from the key stakeholders and the network management teams from the South East London Cancer Network and Kent and Medway Cancer Network.

There is a Senior Lead, Medic and Nurse Manager who attend the Network forum. The Chief Executive attends the Network Board Meetings.

4.9 Operational Policy Annual Review Meeting
The MDT will meet at least once each year with all key stakeholders to review the operational policy. Changes will be disseminated to all key stakeholders by the Neuro-oncology clinical lead. This meeting is chaired by the Clinical Lead for Neuro-oncology. Any changes made to the operational policy will be discussed in this meeting. The lead clinician takes the responsibility of circulating the updated operational policy and the topics which will be discussed. Other core members who wish to bring about changes should notify the lead clinician of the topics they wish to discuss prior to the meeting. This meeting is minuted.
4.10 The Role of the Clinical Nurse Specialist
The Neuro-oncology Clinical Nurse specialist role includes:

- To be the first point of contact for patients accepted under the care of the MDT.
- Act as key-worker or responsible for nominating the key worker for the patient.
- To educate support and counsel patients providing relevant written information as appropriate.
- To lead on patient and carer’s communication issues for the MDT.
- To co-ordinate the pathway of the patients referred to the neuro-oncology MDT meeting, ensuring where clinically appropriate that delays are avoided.
- To contribute to the MDT discussion, patient assessment and care planning decisions of the team.
- To ensure that patients are able to access members of the MDT for support and advice as appropriate.
- Develop the nurse led services as agreed by the MDT.
- Contribute to the Trust wide development of cancer services as requested and work as a member of the Cancer Nurses Forum.
- Provide teaching and educational input to relevant courses and provide expert nursing advice and support to other health professionals in the area of neurological cancer.
- Ensure effective written communication and verbal communication between the MDT, referring Trusts, GPs and specialist centers.
- Work with the Trust Cancer Data Team supporting the collection of neurocancer data and involve in clinical audit.
- To contribute to the management of the neuro oncology service.
- To be involved in research in the area of neurological cancer.

4.11 The Role of the MDT Co-ordinator
The MDT Co-ordinator supports each MDT meeting. This co-ordinator ensures that all patients requiring discussion are added to the meeting agenda, that all necessary diagnostic information (scans, reports etc) is available, that the management plan agreed at the meeting is recorded and that cancer waiting time data is collected. The MDT co-ordinator works closely with the CNS, supporting the exchange of information between the specialist team and referring units. Referring units are able to access the MDT co-ordinator direct through email/fax/phone to ensure that patients are discussed at the specialist MDT without delay. Requests and organisation of diagnostic information are co-ordinated through this role.

4.12 Service Improvement
The Lead Clinician is nominated as the person responsible for ensuring that service improvement is integrated into the functioning of the MDT.

4.12.1 Key worker
All patients accepted to the MDT will be allocated a Key Worker who will co-ordinate the care through the pathway. This will be the most appropriate person.
5.0 Organisation of Care

5.1 Surgical Services
All surgery for neurological tumours within the catchment networks is carried out on the Kings College Hospital site by members of the core team.

Following discussion at the MDT meeting and completion of recommended investigations at the local hospital, patients accepted for surgical intervention are admitted to the KCH site, usually a day before the planned surgery. Depending on clinical and technical issues, patients may undergo biopsy, debulking or complete resection of tumours. The theatres at KCH are equipped with state of the art stereotactic and image guidance systems to allow localisation and accurate approach to the tumours. Expertise is available for functional mapping and awake surgery if needed. Following surgery, patients are cared for on the neurosurgical high dependency and then ward beds. The patients are then discussed in the subsequent MDT meeting to correlate the histology, radiology and clinical findings and formulate further management and referral-on aspects.

There are also regular clinics preceded by an MDT meeting for discussion of all patients to be seen in the clinic.

It should be noted that all consultant neurosurgeons at KCH, along with their team, take part in the emergency on call rota. Advice and expertise are therefore always available should a patient require urgent transfer/ intervention.

See Appendix for contact details

5.2 Radiological Services
Cross-sectional diagnostic imaging (CT and MRI) from both King’s College Hospital and the regional district general hospitals is reviewed at the neuro-oncology MDT by a consultant neuro-radiologist both pre-operatively and post-operatively. With some difficult cases we have the option of using MR spectroscopy or functional MRI.

Expertise for CT guided biopsy of spinal and para-spinal tumours is available. When a conclusive MDT decision is not possible we have the option of following-up patients in the dedicated neuro-oncology clinic with further interval cross-sectional imaging reported by the neuro-radiologist.

See Appendix for attached Neuro-Radiology Guidelines

5.3 Pathology services
The biopsies are reported in the Department of Clinical Neuropathology within 24-48 hours depending on need for immunohistochemistry. Intra-operative (frozen and smear) diagnoses are available on a 24-hour basis. The reports can be reviewed on the EPR system immediately after authorisation of the report. The Neuropathologists undertake a rigorous audit system to review all cases. Neuro-pathology participates in the national and European QAs for both the neuropathologists and laboratory techniques. Molecular techniques are available.

Neuro-Pathology will be reported in line with the RCP guidelines and protocols.
5.4 In-Patient ward facilities
The unit accepts both emergency and elective admissions from this area. Neurosciences provides a challenging but exciting working environment and the unit is committed to providing high quality nursing care, using Essence of Care as a benchmark for best practice. A Modern Matron, a Practice Development Nurse and a team of clinical nurse specialists support the unit, providing day-to-day support for the ward staff and patients and acting as clinical resources.

The unit comprises:

Murray Falconer ward – a thirty one bedded acute neurosurgical ward, caring for the complete spectrum of elective and emergency neurosurgical conditions

Kinnier Wilson ward – a twenty bedded acute neurosurgical ward, which also cares for the complete spectrum of elective and emergency neurosurgical admissions

David Marsden ward – a twenty three bedded neuromedical ward, which, in addition to caring for elective and emergency neuromedical patients, has a five bedded telemetry unit. The ward is also the site for the pilot project to set up a nurse directed cohort of eight designated spinal beds.

Kinnier Wilson High Dependency Unit – a twelve bedded neurosurgical and neuromedical unit, that provides care for acutely unwell patients that require a higher level of nursing care and medical intervention than that which can be provided in the ward environment. Six level three beds are available on the Surgical Critical Care Unit.

In-patient areas for Young Persons is currently under development. Children and Young Persons will be managed according to the South London and Kent and Medway Children and Young Persons pathway.

The Children and Young Persons neurosurgery and in-patient care is compliant with the South London and Kent and Medway age appropriate pathway.

Staff development is actively encouraged within the unit, with Band Five and Band Six staff rotating between the wards, in order to develop clinical skills in the varied environment of neurosciences nursing. All new staffs have a five day organisational induction and are also offered a five day local induction. Education is provided either in-house by the Practice Development team or courses run by the Education Department. Staffs are encouraged to actively explore opportunities to undertake relevant postgraduate studies. Staffs are also able to gain valuable mentoring experience as pre-registration students undertake placements on the unit throughout their training.

5.5 Oncology Services

Patients requiring adjuvant therapy are treated under the oncology guidelines.

If a patient is not well enough to withstand a full course of treatment, palliative radiotherapy may be discussed with them. We offer a varied range of palliative regimes. The aim is to control symptoms and enhance the patient’s quality of life. Upon a diagnosis of a high grade brain tumour referral to palliative care is offered.
and recommended. This is done either through the multi-disciplinary meeting if the patient is an inpatient, or it can be done by the clinical nurse specialist at any time during the patients care. As patients conditions progress the clinical nurse specialist can then make referrals to community palliative care as agreed by them and the patient/carer. Palliative care referrals can also be made by the GP.

5.6 Palliative and Supportive Care
There is a well established Palliative Care Service at King’s. Out of hours nursing care is provided by a number of local providers.

Early referrals for patients on active treatment, given with palliative intent, are encouraged in the local area. In such patients, the prognosis will usually be limited and focus of treatment will have changed from curative to palliative. A demonstrable need for specialist palliative care services must be established. Appropriate reasons for referral include: pain control, control of other symptoms, e.g. vomiting, psychological distress of patient/family or carer, terminal care/dying (prognosis usually less than two weeks) and complex social needs. The patient and/or their family/carer must be informed and agree to the referral.

All senior staff delivering significant news will be or have undertaken the Advanced Communication Course.

5.7 Other Clinical Support Services

5.7.1 Neuropsychology
The neuropsychology service is essentially a diagnostic assessment. A detailed neuropsychological assessment is carried out to determine the nature and extent of intellectual and cognitive impairments in these patients. The assessment covers a range of functions including intellectual functions, memory, language, perception and executive functioning.

Referrals come via the neurosurgeons and the neuro-oncology clinical nurse specialists. Referrals are also received from the oncologists at St Thomas’ Hospital and Maidstone Hospital who are part of the Joint Neuro-Oncology Clinic at Kings College Hospital. Referrals also come from neurologists.

Patients may be referred for a number of reasons including:
- patient or relative or one of the MDT members is concerned about changes in the patients intellectual or cognitive functioning
- provide a baseline before surgery
- provide baseline prior to radiotherapy treatment
- work related issues
- Post radiotherapy and long term follow-up as appropriate

See Appendix for contact details
5.7.2 Physiotherapy
Kings College Hospital currently provides inpatient physiotherapy to this patient group.

Patients can be referred for the following reasons:
- Reduced mobility due to balance and gait disturbance.
- Limb Weakness which impacts on function.
- Walking aid provision.
- Respiratory assessment if acutely unwell.

5.7.3 Speech and Language Therapy
Kings College Hospital currently provides inpatient Speech and Language therapy for this patient group.

Patients are referred for the following reasons:
- Swallow assessment
- Communication assessment from mild dysphasia to severe impairment

5.7.4 Occupational Therapy
Kings College Hospital currently provides inpatient Occupational Therapy for this patient group.

Patients can be referred for:
- Impairments that impact on their ability to complete self care, work or leisure activities.
- Cognitive impairment related to neuro-oncology diagnosis.
- Assessment of ability to carry out functional tasks required to manage in own environment.

The main aim of the acute therapy team is to assess and refer on to appropriate local hospital-based or community service depending on need.

See appendix for contact details

5.7.5 Counselling
King's College Hospital has a number of qualified and trainee counselors who offer free counseling to inpatients, outpatients, relatives and friends.

5.7.6 Interpretation Service
King's College Hospital provides an interpretation service as listed below
- Onsite Spanish and Italian Interpreting and Translation
- Interpreters for pre-booked face to face consultations
- Telephone interpreting for urgent situations when it isn't possible to pre-book an interpreter to come on site (24 hours a day)
- Translators for the deaf and hard of hearing RNID/RAD interpreters
- Pre-booking is required
5.8 Citizen Advice Bureau (cab)
Neuro-oncology patients at St Thomas’ Hospital have access to on site Citizen Advice Bureau clinics provided fortnightly.
6.0 Clinical Guidelines:

Increased awareness and a low threshold of suspicion are probably the most important means of decreasing the delay in diagnosis of brain tumours. Patients with brain tumours usually present with symptoms of raised intracranial pressure such as headaches, nausea and vomiting; focal neurological deficits such as hemiparasis and cranial nerve palsy or epilepsy.

Agreed referral criteria and treatment protocols will determine which patients the specialist team will treat, or refer back to the local unit. The patient pathway for access to the specialist MDT is attached (Appendix). The pathway will be subject to network ratification and annual review. This ensures that all patients are discussed by a member of the relevant specialist team prior to commencement of treatment.

6.1.1 GP consultation

Once a brain tumour is suspected, GP’s can refer patients via the two-week wait office to the local hospital for review and investigations by the specialist, which will predominantly be the local neurologists. These require the two week wait referral forms to be completed.

The following should sound alarm bells with General Practitioners:

SELCN GUIDELINES FOR REFERRAL TO CNS CLINICS

- Subacute progressive neurological deficit developing over days to weeks (e.g. weakness, sensory loss, dysphasia, ataxia)
- New onset seizures characterised by one or more of the following:
  - Focal seizures
  - Prolonged post-ictal focal deficit (longer than one hour)
  - Status epilepticus
  - Associated inter-ictal focal deficit
- Patients with headache, vomiting and papilloedema
- Cranial nerve palsy (e.g. diplopia, visual failure including optician defined visual field loss, unilateral sensorineural deafness).

Consider urgent referral for:

- Patients with non-migrainous headaches of recent onset, present for at least one month, when accompanied by features suggestive of raised intracranial pressure (e.g. woken by headache, vomiting, drowsiness).

NB: This last guidelines is intended to provide the primary care physician with the discretion to decline urgent referral if there are other known features (e.g. depression, somatisation disorder) making a diagnosis of brain tumour very unlikely.

Patients should be aware of and understand the reason for referral to the Neuro-Oncology service.
Initial investigations such as CT scan of the brain may be organised by the general practitioners while waiting for the clinic appointment in the local hospital. However, the above investigations should not delay referral. If the radiological investigations suggest or confirm a neurological malignancy, the patient should then be referred to the neuro-oncology centre for discussion in the MDT meeting. It is expected that these patients will be discussed in the Unit MDT meeting prior to referral. The unit may be requested to further investigate and stage the tumour by the neuro-oncology MDT.

6.1.2 Appropriateness and timeliness of urgent and suspected neurological tumours GP referrals

**Appropriateness** - All the urgent GP referral under the two week wait rule are audited. Those referrals that do not meet the Two Week Wait guidelines in terms of appropriateness are fed back. The data is then forwarded to the PCTs and SELCN Primary Care Service Improvement Lead on a monthly basis.

**Timeliness** – the two week wait database produces reports on this which, as above, are sent to PCTs and SELCN Primary Care Service Improvement Lead on a monthly basis.

6.2 Referral Guidelines – South East London Cancer Network and Kent and Medway Cancer Network referring diagnostic teams

All patients with radiological suspicion of a neurological malignancy should be referred to the Neuro-oncology MDM for discussion on further management.

Neurosurgical Registrar at Kings College hospital on mobile 07747 562 094 or page KH0777 (via switchboard 020 3299 9000) acts as a contact for Neurosurgical emergency advice.

6.2 Investigations prior to referral

Patients with a scan showing a possible abscess, tumour with associated hydrocephalus, spinal cord compression, posterior fossa or midline or 3rd ventricular tumour, or GCS 13/15 or less warrant emergency referral and must have the following investigations undertaken:

- Brain contrast CT scan, preferably a contrast MRI scan
- Chest x-ray
- Full blood count/U+E/Clotting screen
- If patient uses Aspirin, Warfarin, Clopidogrel or Dipyramidole, they must be stopped
- Commence patient on Dexamethasone 8mgs bd and Omeprazole 20mgs od (unless abscess suspected)
All other patients must have the following investigations done prior to referral

- Brain MRI with Gadolinium scan (contrast CT if patient cannot tolerate MRI)
- Chest x-ray
- If metastatic disease suspected: Chest/Abdomen/Pelvis CT scan and tumour markers
- If spinal tumour suspected: whole neural-axis MRI scan
- Full neurological examination
- Full blood count/U+E/Clotting screen
- If patient is on Aspirin, Clopidogrel or Dipyridamole they must be stopped
- Stop anticoagulants eg warfarin unless high risk such as metallic heart valve, intra-cardiac thrombus or pulmonary embolus in the previous 6 months. In these cases may switch over warfarin to intravenous heparin infusion.
- Commence patient on Dexamethasone 8mgs bd and Omeprazole 20mgs od (unless abscess suspected)

The neuro-oncology MDT may require the local hospital/ referring team to perform further investigations before a definitive management plan can be formulated or patient transferred to the neurosciences centre. Specialist imaging maybe organized after MDT discussion

Please refer to the Network Imaging Guidelines for further detailed information

6.3 Surgical Guidelines

Preoperative Investigations:

- Patients undergoing neurosurgery need to fulfill general fitness and anaesthetic criteria.
- Any metabolic, hematological (particularly platelet) and clotting abnormalities should be corrected.
- Non steroidal anti inflammatory drugs eg Aspirin, Clopidogrel and Dipyridamole should be stopped at time of referral and at least 10 days before surgery.
- Anticoagulants such as warfarin should be stopped except in high risk patients such as those with intra-cardiac thrombus, metallic heart valve or a pulmonary thrombus in the previous six months.
- In such high risk patients warfarin should be switched over to intravenous heparin (if in doubt discuss with the local Haematologist).
- In all patients being transferred under the emergency protocol, anticoagulants should be stopped in preparation for imminent surgery upon admission to KCH.
- Almost all patients with brain tumours undergoing surgery will need to be on Dexamethasone to cover the peri-operative period. The neurosurgical team can be contacted for advice with regard to this.
- Patients with epilepsy will need to be on anti-epileptic medications.

It is essential that the patient is spoken to by the local team regarding the reason for referral to Kings College Hospital and documentation of the discussion must be done in the patients local notes.
An open and honest discussion must be undertaken by a person trained in advanced communication.

6.3.1 Surgical Procedures:
Depending on the clinical condition of the patient, the location and size of the lesion, and the nature of the tumour (based on the macroscopic appearance of the lesion at operation as well as the intra-operative histology assessed by frozen section and smear), one of the following options may be selected:

1. Biopsy: Usually for deep seated lesions or for tumours located in the critical areas of the brain. Stereotactic techniques allow accurate localisation of the target, reducing the risk of surgery whilst increasing the diagnostic yield.

2. Partial excision/ debulking: usually for larger more superficially located intrinsic brain tumours. Modern neuronavigational systems combined with techniques such as awake surgery allow more extensive resection whilst reducing the risks

3. Complete resection: usually for “benign” tumours such as meningiomas or some low grade gliomas

6.4 Pathology guidelines
The biopsies will be reported by a qualified Consultant Neuropathologist in the Department of Clinical Neuropathology within 5 days. Intra-operative (smear) diagnoses are available on a 24-hour basis. A fully integrated pathology report should be available within 5 days. This includes histology and special techniques.

Molecular analysis, such as FISH technique for chromosome 1p and 19q rearrangements in gliomas is now available in house.
7.0 Data Collection

7.1 Neuro-oncology Database and Minimum dataset

The Kings College Hospital database will be compliant and compatible with the national cancer dataset.

The Thames Cancer Register and Two-Week Wait databases will be maintained.
8.0 COMMUNICATION AND PATIENT SUPPORT

8.1 Communication with Patients and Families

- All patients will be allocated a Key Worker
- Information Prescriptions will be given at key times
- All patients will be given information by members of staff trained in Advanced Communications
- No information will be given by junior doctors
- All patients will be offered a copy of clinic letters and hand held records

Further information for patients can be gained from 1. SELCN patient information web site at www.patientinfo.selcn.nhs.uk
2. Richard Dimbleby Information at St Thomas’
3. Kent Information Centre

Relevant information is available to all patients at each point in their care pathway. Written and verbal information is available from the nurse specialist. The documents available are:

Copying letters to patients
All patients will be asked during their first clinic attendance if they would like to receive copies of their clinic letters and discharge summaries. The decision is recorded in the notes and copies of all communications if requested are sent to patients routinely.

8.2 Communication with General Practitioners and referring Consultants

8.2.1 Notification of General Practitioner:

General Practitioners will be informed at the following points:
- 24 hours post discussion of referral
- 24 hours post discussion with patient
- On discharge
- MDT update outcomes
- At any other key points in the patient pathway

As standard practice, clinic letters are sent out within 2-3 days of the appointment. Our longer term approach will be for all clinic letters to be sent out electronically immediately after each patient visit.

Discharge Summaries are sent to general practitioners and referring consultants within one week of discharge.

The neuro-oncology database is an important tool for communication with general practitioners and referring consultants. The database has easy printable summary sheets for communication between clinicians and to place within patient case notes.
The database summary sheet is used as the basis for the fax back information sheet sent to all referring clinicians after discussion of the patient at the MDT meeting. Additional communication to referrers includes outpatient clinic letters and discharge letters.

*Information is provided to the PCT’s on a monthly basis from the Two Week Wait office on the appropriateness and timeliness of the urgent suspected cancer referrals.*

### 8.3 Patient Access – Travel and Accommodation

Patients will be given travel and accommodation details on request (see appendix).
9.0 Audit

9.1 Cancer Waiting Times
In accordance with national requirements, Kings College Hospitals monitors cancer waiting times. This must be done for patients who are referred directly from primary care but also for tertiary patients where Kings must work with referring hospitals to ensure that patients do not breach waiting times.

An audit programme is an essential component of the cancer centre.

9.2 Patient Satisfaction Survey
In line with the National patient satisfaction survey this will be undertaken and be subjected to peer review. The MDT core group will review the results of this survey and peer review actions arising will be agreed and an implementation action plan formulated ensuring changes are made in a timely fashion. Progress on changes will be reported on at their next annual meeting. Monitoring of action points will be the responsibility of service improvement Lead.

9.3 Clinical Outcomes Audit and Action Planning
These will be undertaken annually and reviewed
10.0 Participation in approved clinical trials

The MDT will consider patients into local and national clinical trials
11.0 Appendices

Appendix MDT proforma
Appendix Patient pathway
Appendix Referral proforma and guidelines
Appendix Patient access
PROTOCOL FOR REFERRAL OF NON-EMERGENCY NEUROSURGICAL PATIENTS TO KINGS COLLEGE HOSPITAL

All patients with suspected intracranial space occupying lesion must have:

- Brain MRI with Gadolinium scan (contrast CT if patient cannot tolerate MRI)
- Chest x-ray
- If metastatic disease suspected: Chest/Abdomen/Pelvis CT scan and tumour markers
- If spinal tumour suspected: whole neural-axis MRI scan
- Full neurological examination
- Full blood count/U+E/Clotting screen
- If patient is on Aspirin, Clopidogrel or Dipyramidole they must be stopped
- Stop anticoagulants eg warfarin unless high risk such as metallic heart valve, intra-cardiac thrombus or pulmonary embolus in the previous 6 months. In these cases may switch over warfarin to intravenous heparin infusion.
- Commence patient on Dexamethasone 8mgs bd (unless abscess suspected)

Note: If scan shows possible abscess, tumour with associated hydrocephalus, spinal cord compression, posterior fossa or midline or 3rd ventricular tumour, or GCS 13/15 or less: Follow the Emergency referral protocol.

Complete the Neuro-Oncology Referral Proforma and refer/arrange for the local Neurologist to review the patient.

Local Neurologist will arrange for patient to be discussed in the Neuro-Oncology Multidisciplinary Team meeting at Kings College Hospital. Contact MDT Coordinator via email neuro-oncology@kch.nhs.uk or call 020 3299 4151 (direct line)

Organise for scans to be imaged linked to Kings or a CD of CT and MRI scans to be sent to Neuro-Oncology Clinical Nurse Specialist, 9th Floor, Ruskin Wing, Kings College Hospital, Denmark Hill, London SE5 9RS by Wednesday for discussion on Friday.

All films sent will have a foreign film report done by a Neuro-Radiologist.

If surgically accessible patient will be transferred to Kings for biopsy, debulking or excision of tumour

If surgically inaccessible patient to stay in local hospital

All patients will be discussed in the Neuro-Oncology Multidisciplinary Team Meeting on Friday at Kings College Hospital and referred to appropriate Oncologist, Neuro-Oncology Clinic or Palliative care

If patient safe for discharge will be discharged home from Kings
If patient unsafe for discharge will be transferred back to local hospital for care package to be organised.
PROVISIONAL DIAGNOSIS: Primary high/low grade, metastatic or abscess

HISTORY SYMPTOMS AND DURATION:

EXAMINATION:
  GCS:
  PUPILS:
  FOCAL NEUROLOGY:

SPINAL TUMOURS: UL/LL POWER AND PERIANAL SENSATION:
  BLADDER AND BOWEL FUNCTION:
  TIME FROM ONSET OF SYMPTOMS:

PAST MEDICAL HISTORY:

FIT FOR GENERAL ANAESTHETIC:

DRUG HISTORY:
  ON ASPIRIN/CLOPIDGREL/DIPYRAMIDOLE/WARFARIN

INVESTIGATIONS:
  FBC/U+E/CLOTTING SCREEN
  CT WITH CONTRAST
  MRI +GADOLINIUM
  CHEST X-RAY
  IF SPINAL WHOLE AXIS MRI

IF METASTATIC SUSPECTED
  CT CHEST/ABDO/PELVIS
  ANY OTHER WORKUP

TREATMENT GIVEN
  DEXAMETHASONE 8MGS BD AT 8AM AND 12PM
  OMEPRAZOLE 20MGS OD AND DAILY BM STIX
  ANTI-EPILEPTIC

SOCIAL HISTORY:

PERFORMANCE STATUS

WHAT HAVE THE PATIENT/FAMILY BEEN TOLD:

REVIEWED BY:
Patient presents with symptoms suggestive of space occupying lesion

CT/MRI scan confirms space occupying lesion
If patient on Aspirin, Clopidogrel or Dipyramidole then stop. Change warfarin to IV heparin if anticoagulation is absolutely indicated (see text above) AND unless abscess suspected commence patient on Dexamethasone 8mgs bd

Undertake neurological examination and further investigations – FBC/U+E/Clotting Screen, MRI+Gadolinium and chest x-ray for all patients. If metastatic disease suspected perform Chest/Abdo/Pelvis CT and tumour markers If spinal tumour perform whole neural axis MRI scan

Complete Neuro-Oncology Proforma and refer to local neurologist for opinion

Neurologist organises for patient to be discussed in the Neuro-Oncology MDM meeting at Kings College Hospital

Send films by image link to Kings or on CD to Neuro-Oncology Nurse Specialist, 9th Floor, Ruskin Wing, Kings College Hospital by Wednesday for discussion on Friday. Contact 020 3299 4151

Patient discussed in the Neuro-Oncology MDM

Operable

Patient transferred to Kings for biopsy, debulking or excision

Patient discussed in Neuro-Oncology MDM and referred to appropriate Oncologist

Patient safe for discharge

Discharge Home

Inoperable

Referred to Neuro-Oncology Clinic at Kings College Hospital

Patient unsafe for discharge or needs care

Refer back to local hospital

Scan shows possible abscess, tumour with associated hydrocephalus, Spinal Cord Compression, posterior fossa, midline or 3rd ventricular tumour, or GCS 13/15 or less

Follow emergency protocol
PROTOCOL FOR REFERRAL OF EMERGENCY NEUROSURGICAL PATIENTS TO KINGS COLLEGE HOSPITAL

All patients admitted with suspected space occupying lesion must have:

- Brain contrast CT scan, preferably a contrast MRI scan
- Chest x-ray
- If patient is on Aspirin, Warfarin, Clopidogrel or Dipyramidole, these must be stopped
- Commence patient on Dexamethasone 8mgs bd (unless abscess suspected)
- FBC/U+E/Clotting screen

If scan shows possible abscess, tumour with associated hydrocephalus, spinal cord compression, posterior fossa or midline or 3rd ventricular tumour, or GCS 13/15 or less:
(Note: All other cases follow the Non-Emergency referral protocol)

- Complete Neuro-Oncology Referral Proforma and contact Neurosurgical Registrar at Kings College Hospital on mobile 07747 562 094 or Kings switchboard on 0203 299 9000 page KH0777
- Organise for films to be imaged linked to Kings College Hospital and CD of films to be couriered to Kinnier Wilson Ward with copy of referral proforma
- All films sent will have a foreign film report done by a Neuro-Radiologist

If surgically accessible patient will be transferred to Kings for biopsy, debulking or excision of tumour

If surgically inaccessible patient to stay in local hospital

All patients will be discussed in the Neuro-Oncology Multidisciplinary Team Meeting on Friday at Kings College Hospital and referred to appropriate Oncologist, Neuro-Oncology Clinic or Palliative care

If patient safe for discharge will be discharged home from Kings

If patient unsafe for discharge will be transferred back to local hospital for care package to be organised

The Nominated Neuro-Oncology Trust Lead Clinicians will ensure that all the protocols are adhered to and referral forms are fully completed
### PROVISIONAL DIAGNOSIS
Primary high/low grade, metastatic or abscess

### HISTORY SYMPTOMS AND DURATION

### EXAMINATION
- GCS:
- PUPILS:
- FOCAL NEUROLOGY:

### SPINAL TUMOURS
- UL/LL POWER AND PERIANAL SENSATION:
- BLADDER AND BOWEL FUNCTION:
- TIME FROM ONSET OF SYMPTOMS:

### PAST MEDICAL HISTORY

### FIT FOR GENERAL ANAESTHETIC

### DRUG HISTORY
ON ASPIRIN/CLOPIDGREL/DIPYRAMIDOLE/WARFARIN

### INVESTIGATIONS
- FBC/U+E/CLOTTING SCREEN
- CT WITH CONTRAST
- MRI +GADOLINIUM
- CHEST X-RAY
- IF SPINAL WHOLE AXIS MRI

### IF METASTATIC SUSPECTED
- CT CHEST/ABDO/PELVIS
- ANY OTHER WORKUP

### TREATMENT GIVEN
- DEXAMETHASONE 8MGS BD AT 8AM AND 12PM
- OMEPRAZOLE 20MGS OD AND DAILY BM STIX
- ANTI-EPILEPTIC

### SOCIAL HISTORY

### PERFORMANCE STATUS

### WHAT HAVE THE PATIENT/FAMILY BEEN TOLD

### REVIEWED BY
Patient presents with symptoms suggestive of space occupying lesion

CT/MRI scan confirms space occupying lesion
If patient on Aspirin, Warfarin, Clopidogrel, Dipyramidole then stop it **AND unless abscess suspected** commence patient on Dexamethasone 8mg bd

Scan shows possible abscess, tumour with associated hydrocephalus, Spinal Cord Compression, posterior fossa, midline or 3rd ventricular tumour, or GCS 13/15 or less

Scan shows non-emergency tumour
Follow non-emergency protocol

Complete Neuro-Oncology Referral Proforma and contact Neurosurgical Registrar at Kings College hospital on mobile 07747 562 094 or bleep KH0777 (via switchboard)

Courier CD of films to Kinnier Wilson Ward or image link films to Kings College Hospital with copy of referral proforma

Operable
Patient transferred to Kings and surgery undertaken – biopsy, debulking or excision

Patient discussed in Neuro-Oncology MDM on Friday at Kings and referred to appropriate Oncologist, Neuro-Oncology Clinic or Palliative Care

Inoperable – stay in local hospital
Patient discussed in Neuro-Oncology MDM on Friday at Kings and referred to appropriate Oncologist, Neuro-Oncology Clinic or Palliative Care. **Contact details for MDT Co-ordinator 020 3299 4151 or fax 020 3299 1665**

Patient safe for discharge
Discharge Home

Patient not safe for discharge or needs care
Back to local hospital
Contact details

Patients for MDT discussion at King’s College Hospital can be made directly, as agreed with both networks, using the network agreed proforma (Appendix) faxed directly to the Neuro-Oncology MDT Co-ordinator - 0203 299 1665 or telephone 020 3299 4151

All relevant histology and radiology must be sent concurrently, to prevent delay to
  Neuro-oncology MDT Co-ordinator
  9th Floor Ruskin Wing
  King’s College Hospital
  Denmark Hill
  London

  Email: neuro-oncology@kch.nhs.uk
  Fax 0203 299 1665
  Telephone: 020 3299 4151

Palliative Care
The team provide a Monday - Friday 9:00am to 5:00pm service. At weekends a SpR is available across Guy's, King's and St Thomas' (GKT) to see patients in King's. A consultant is also available after 5pm and before 9am to offer telephone advice for healthcare professionals with palliative care problems.

  Neuro-Psychology         020 3299 8330
  Occupational Therapy     020 3299 2338
  Physiotherapy           020 3299 2724
  Speech and Language Therapy 020 3299 4665
  Counseling               02032991567/email CPT@kch.nhs.uk
11.1 Patient Access - Travel and Accommodation

Road travel:
Over the past three years the King’s site has change radically with the opening of a new building (the Golden Jubilee Wing) and improved management of traffic circulation around the site. There are new, larger parking facilities on the hospital campus sited adjacent to clinical areas. King’s is outside the Congestion Charging zone.

Both Guys and St Thomas and Maidstone have limited parking for patients and relatives. There is a large NCP car park adjacent to Guys hospital.

Hospital transport:
In certain, clinically indicated, circumstances, hospital transport may be provided to enable patients to attend the Outpatient Clinics – this can usually be arranged via the patient’s GP. However, in exceptional instances the Specialist Centre’s CNS’s may be of assistance in organising this facility.

Rail travel:
Denmark Hill Station is 5 minutes walk from King's. Denmark Hill has regular direct rail links to:
   - Central London - Blackfriars, London Bridge and Victoria
   - South East England and Kent - Orpington, Sevenoaks, Dartford, etc.

Loughborough Junction Station (Thameslink services to London Blackfriars via Elephant and Castle) is approximately 12 minutes walk away.

Both Guy’s and St Thomas Hospitals are within easy reach of the main line underground stations. Guy’s Hospital has a dedicated walkway from the hospital building into London Bridge mainline and underground stations. St Thomas Hospital is a seven minute walk from Waterloo/Waterloo East main line stations and Waterloo and Lambeth North underground stations.

Bus Travel:
All three sites of the Joint Cancer Centre have excellent access from a number of bus routes

Accommodation:
An up-to date-list of local bed and Breakfast accommodation can be supplied to patients