**Adult Neuro-Oncology Service Provision during COVID-19 outbreak:**
**UPDATE JAN 2021**

Following a return to near normal service provision in latter 2020, the current surge in Coronavirus cases and high levels of community transmission requires an updated framework for neuro-oncology cases. This guidance document includes a section on pre-operative testing for coronavirus. Any alteration in the standard of care offered to patients should be clearly documented.

**At a glance - guidance for clinicians**

- Restrict out-patient face to face contact
    - Except for new patients that need urgent surgery or for 1st oncology appointment
- Use teleconsultation (Attend anywhere), phone, letter, or e-mail
- Surgery for urgent cases only
- Continue to use chemo and radiotherapy for those most likely to benefit
- Run the MDT using virtual platforms (TEAMS)
- Record the reasons if you are not offering standard treatment in a standard timescale to patients
- Continue to support all patients even those who may now not get treatment

**New Brain Tumour Patients**

High surgical priority

- Resection of malignant glioma in patients suitable for adjuvant oncology treatment
- Posterior fossa tumours (malignant or non-malignant) causing symptomatic or life-threatening hydrocephalus
- Meningioma causing major mass effect and neurology (e.g. hemiparesis) or which are life-threatening
- Supratentorial brain metastases requiring resection
- Rare brain tumours (e.g. lateral / third ventricle, pineal) causing hydrocephalus – consider temporising measures such as ETV or VP shunt and delaying definitive surgery (exceptions include germ cell tumours and pineoblastoma)
- Consider non-operative approaches in patients least likely to gain significant benefit from treatment e.g. elderly patients with clear diagnosis of high-grade glioma on MRI (e.g. consider radiotherapy without biopsy or best supportive care).

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Low surgical priority – consider postponement

- Low grade glioma (resection and biopsy) where a period of interval monitoring with MRI is a reasonable management option
- Skull base tumours (e.g. meningioma, vestibular schwannoma) with minimal symptoms where an elective scheduled procedure was already planned

Oncology high priority

- High grade glioma for treatment with radiotherapy and chemotherapy
- Chemotherapy may be omitted in MGMT unmethylated glioblastoma patients
- Brain metastases for stereotactic radiosurgery or whole brain radiotherapy
- Radiotherapy for other rare malignant tumour (e.g. anaplastic astrocytoma, pineoblastoma, PNET)

Oncology low priority - consider postponement

- Radiotherapy and chemotherapy for low grade glioma where an initial period of monitoring is a reasonable option
- Radiotherapy for atypical meningioma or recurrent meningioma

**Surgical pathway and pre-operative Coronavirus testing**

The risk of pulmonary complications and death in patients with positive coronavirus tests undergoing surgery for solid organ cancer has been reported (https://doi.org/10.1002/bjs.12050):

| 30-day postoperative outcomes | Previous SARS-CoV-2 positive swab *N = 122* | Time from previous SARS-CoV-2 positive swab | | |
|---|---|---|---|---|
| | | *1 to 2 weeks N = 27* | *2 to 4 weeks N = 60* | *> 4 weeks N = 35* |
| **Pulmonary complications** | **9·8%**(5·2%-16·6%)12/122 | **18·5%** (6·3%-38·1%)5/27 | **11·7%** (4·8%-22·6%)7/60 | **0·0%**(0·0%-10·0%)0/35 |
| **Mortality** | **3·4%**(0·9%-8·4%)4/119 | **7·7%** (0·9%-25·1%)2/26 | **3·4%** (0·4%-11·7%)2/59 | **0·0%**(0·0%-10·3%)0/34 |

Whilst ideally all patients should wait 4 weeks for surgery, this is not appropriate for some brain tumour patients and so a pragmatic balanced approach is needed with discussion of risks and benefit with each patient. The following guidance is offered:

- Use separate pathways for Covid negative and Covid positive patients
- Pre-operative Covid PCR testing as per NICE guidance [1]:
    - Negative patients should self-isolate for 14 days before surgery (or as long as possible depending on urgency)
    - Positive patients who are asymptomatic must also self-isolate for 14 days before surgery – repeat swabs are not necessary. Aim to delay surgery by 2 weeks from date of positive test if possible
    - Positive patients who are symptomatic should be deferred for 10 – 14 days and be apyrexial before surgery (whenever safely possible). Repeat swabs are not necessary as they can remain positive for up to 90 days and do not necessarily guide treatment
- Depending on local availability consider vaccination for patients if their scheduled date for surgery is 2 weeks later

**Follow up brain tumour patients**

- Follow-up for all brain tumour patients should be by videoconference or phone.

**Non-malignant brain tumours**

- No surgery for non-malignant, asymptomatic (or minimally symptomatic) brain tumours to be performed as elective services close

**MDT Meetings**

- Weekly MDTs should continue using virtual platforms (e.g. TEAMS)

**Research Activity**

- Brain tumour trials should stay open and recruiting where possible

Implementation will depend on local capacity and impact of the current surge in cases. Please keep up to date with both local and national advice.

1. https://www.nice.org.uk/guidance/ng179/resources/visual-summary-pdf-8782806637

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