Guidelines for use of steroids for Primary & Metastatic intra-cranial lesions

Edinburgh Cancer Centre
Western General Hospital

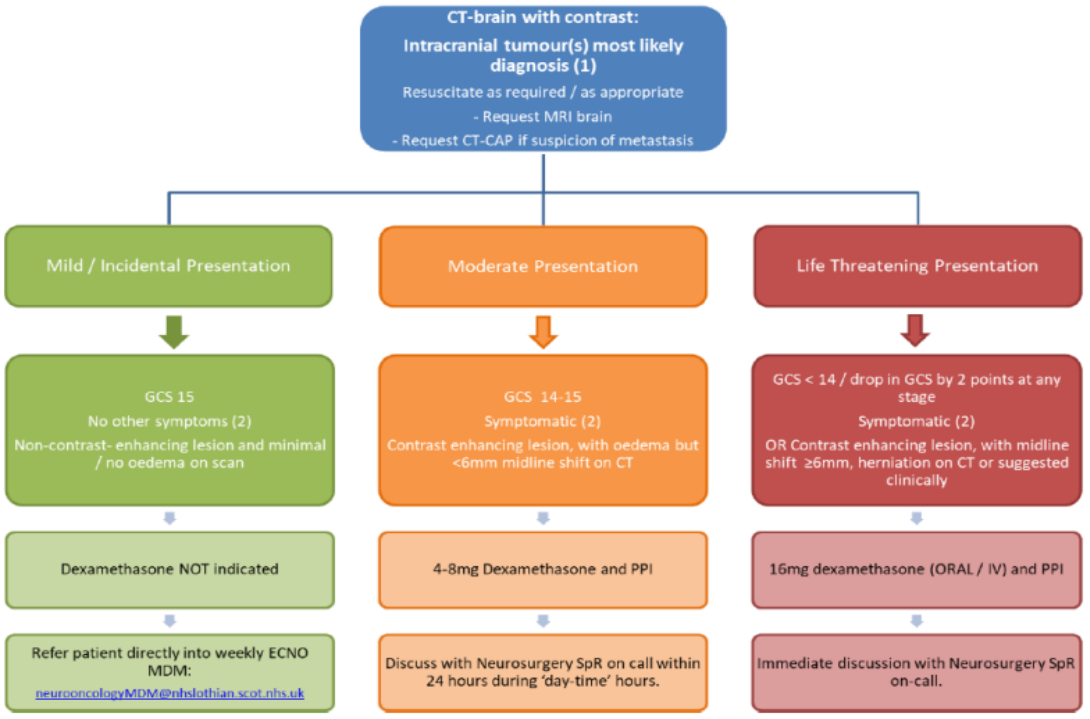
The flow chart below shows the Acute Medical Guidelines for initial management of newly diagnosed brain lesion.

Patients with known cancer and brain metastases should be discussed with a site specialist oncologist (if not urgent contact their oncology consultant or if urgent via on call oncology STR).

Referral to neuro-surgery or ECNO MDM **only indicated** when surgery or radiosurgery (SRS) are being considered (see OOQS for referral guidance).

Edinburgh Centre for Neuro-oncology guidance for the management of intracranial tumours in the acute setting.

Below is an algorithm to aid clinical decision making for patients presenting to the Emergency Department / Acute Receiving Unit with an intracranial lesion felt to most likely represent a primary brain tumour or metastatic deposit. Many of the frequently asked questions are answered as 'Guidance Notes' in the blue box, but specialist help should be sought for any additional queries not answered within this guidance. Please direct feedback to the contact points below.



Guidance Notes

(1) Patients with a known malignancy should be initially discussed with on-call Oncology. Reported scan appearances favouring CNS metastases in patients not known to have cancer should be discussed with both on call Oncology, and also Neurosurgery for advice regarding raised ICP.

(2) Neurological Symptoms: include motor or sensory deficit, or disturbance of bulbar, sphincter or executive function. These are more likely to be steroid-sensitive. Tapering of steroids should be by 25% of the present dose per week, to the lowest **effective dose that the patient's symptoms allow.**

Seizures: Treat status epilepticus. Anti-epileptic drugs are first line treatment for tumour related seizures, and can be used in conjunction with dexamethasone for neurological deficits. Levetiracetam 250mg BD is recommended initially. **Primary prophylaxis for seizures is NOT recommended.**

Additional evidence of hydrocephalus, haemorrhage, infarction or infection should be considered separately, seek relevant specialist help before commencing therapy. Large tumours (including non-contrast enhancing), causing symptoms with minimal oedema, or imaging appearances favouring lymphoma should also be discussed urgently with Neurosurgery on call.

Please direct any comments, questions or feedback to Dr S Erridge, Consultant Neuro-oncologist

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Table 1 - Good Prescribing Practice for Corticosteroids	
1	Document indication for the corticosteroid on the patient's kardex and in notes.
2	Steroids have long half-life so can be prescribed once a day after breakfast. If the patient prefers to have the dose split, then do not give after 14.00. Dexamethasone comes in 4mg, 2mg and 0.5mg (500microgram) tablets.
3	Start gastric protection with a PPI (e.g. omeprazole 20mg od). Note PPI increase risk of C Difficile and can cause hyponatraemia (change to ranitidine) and stomatitis, so should be stopped 7 days after steroids (if no on-going GI symptoms)
4	Ensure appropriate patient information regarding corticosteroids (importance of not stopping suddenly, dietary advice) and dose reduction regimen on discharge. Counsel if necessary.
5	Monitor all patients on high dose steroids for: • Diabetes (peaks at 18.00) – see steroids induced guidance on Endocrinology website • Dyspepsia/ epigastric pain • Mania/hypomania/psychosis

- The steroid dose should be reviewed regularly, and if possible, reduced.
- The speed of reduction will depend on interventions used (e.g. discontinuing after complete resection, or radiotherapy for radiosensitive tumour)
- In general, they should be reduced by around 25% every one to two weeks to the lowest level at which the patient remains well
- It takes at least three days for the impact of reduced steroids to have an impact so symptoms within this period may not be related to steroid reduction.
- If the tumour (metastases) progress the dose may need to be increased.

Table 2: Examples of reducing course – speed depends on individual's symptoms and raised pressure on MRI

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
16mg	12mg	8mg	6mg	4mg	3mg	2mg	1.5mg	1.0mg	0.5mg	stop

Week 1	Week 3	Week 5	Week 7	Week 8	Week 8+
8mg	6mg	4mg	3mg	2mg	Decision made after clinical and imaging review to keep at 2mg

If patient struggles to come off steroids due to withdrawal symptoms (fatigue, aches and pains) options include:

- Alternate day dexamethasone 0.5mg alt day for two weeks
- Conversion to prednisolone (1mg dexamethasone = 7mg prednisolone)
- Synacthen test – liaise with endocrinology