



## **GUIDELINES FOR USE OF STEROIDS IN CANCER PATIENTS**

These Guidelines apply only to those patients with a cancer diagnosis, in whom steroids have been prescribed for symptom management. They should not be used for cancer patients receiving steroids in combination with chemotherapy or radiotherapy, or for patients with a non-malignant diagnosis.

### **Background**

Steroids have many indications for use in palliative care. Dexamethasone is the most commonly used corticosteroid due to the smaller number of tablets at higher doses, and the option for subcutaneous route if necessary. Dose used and duration of treatment varies depending on indication.

Although the short life expectancy of some palliative patients means they are unlikely to be affected by more long-term side effects such as muscle wasting, weakness and osteoporosis, they can still experience diabetes and the more distressing symptoms of insomnia, agitation and psychosis.

### **Management**

1. Choose dose of Dexamethasone based on indication, and document indication clearly in medical notes.

Indication	Dose (mg)
Anorexia	2 - 4
General Well-being	2 - 4
Weakness	2 - 4
Anti-emetic	4 - 8
Bone Pain	4 - 8
Liver capsular pain	4 - 8
Nerve compression pain	4 - 8
Obstruction of viscus	8 - 16
Raised intracranial pressure	8 - 16
Spinal cord compression/Cauda equina compression	16
Superior vena cava obstruction	16

2. Review dose at least every 5-7 days:
  - If started for raised intracranial pressure, spinal cord compression, superior vena cava obstruction or obstruction of viscus
    - Reduce dose every 5-7 days but monitor for recurrence or worsening of symptoms.
  - If started for any other indication
    - If no benefit, stop after 5-7 days.
    - If benefit, try reducing dose every 5-7 days to minimum effective dose.
3. Give dexamethasone as single morning dose, or if higher dose needed give in 2 divided doses, the second being no later than 2pm to minimise risk of sleep disturbance.
4. Ensure patient is aware of common side-effects. If discharged home, ensure patient knows to contact appropriate health care professional if symptoms related to side effects occur.
5. Prescribe gastric protection especially if concomitant use of NSAIDs or bisphosphonates, or previous history of gastrointestinal bleeding. Use Omeprazole 20mg or lansoprazole 15mg daily, although some patients require higher doses if symptomatic.
6. If prognosis longer than 6 months, consider osteoporosis prophylaxis. A bisphosphonate (e.g. Alendronate 70 mg weekly) and Adcal D3 1 tablet twice daily would be first line. Cautions: Check calcium level before commencing Adcal D3 and monitor calcium and phosphate levels during treatment. Monitor for symptoms of gastric irritation or any suggestion of gastrointestinal bleeding.

7. Ensure all patients receive a steroid card.
8. Ensure Proforma for Corticosteroid Use has been commenced.

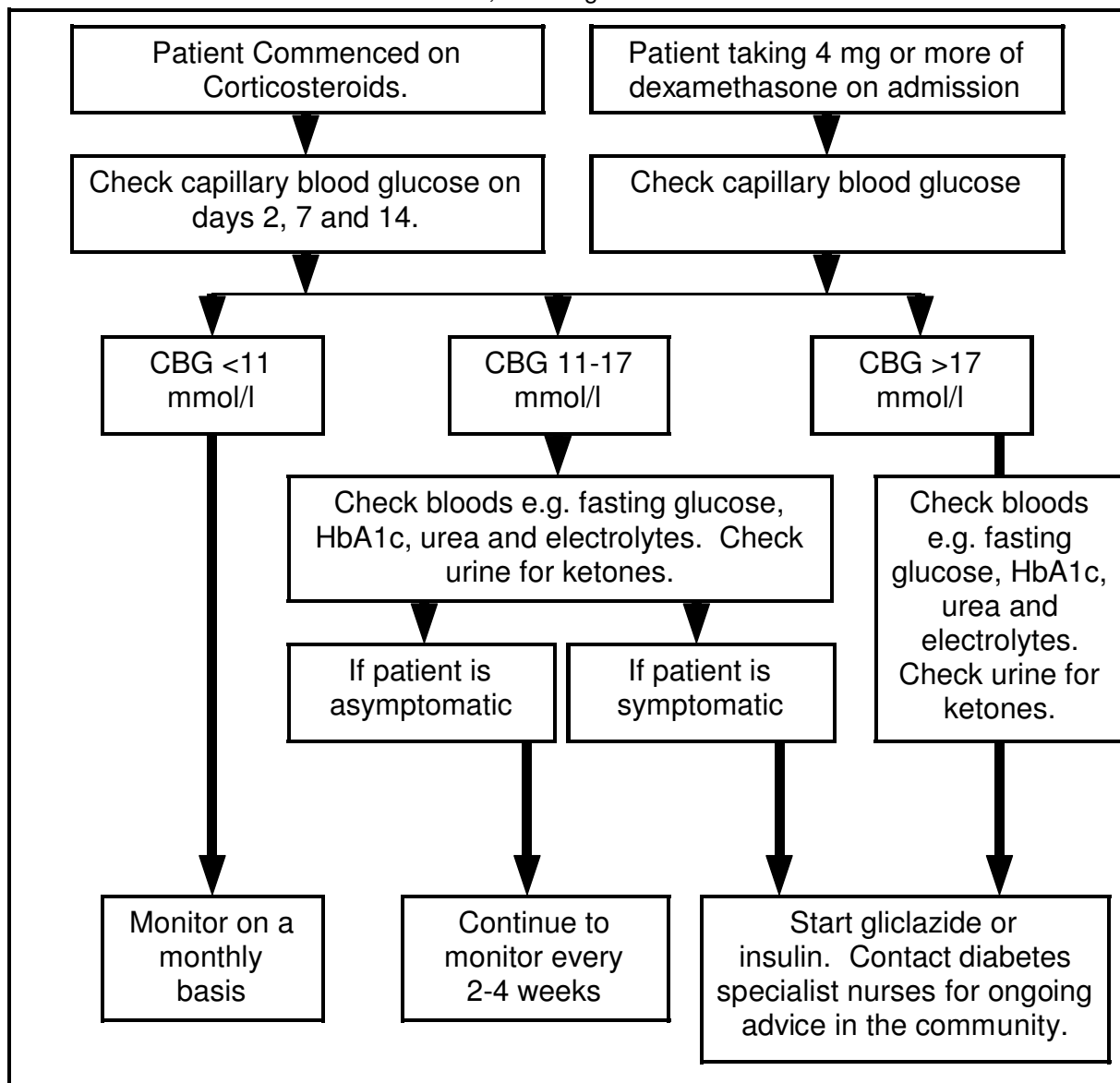
### **Monitoring for Side Effects**

#### Oral Candidal Infection:

- Monitor for oral candida by checking mouth weekly. If present, treat accordingly.

#### Steroid-induced Diabetes:

- If patient not known to be diabetic:
  - Monitor for steroid-induced diabetes, following flow chart below:



- For all patients commenced on oral hypoglycaemics or insulin as a result of corticosteroids, monitor blood sugars on a daily basis.
- If patient known to be diabetic:
  - Continue to monitor blood glucose on a daily basis and be aware that diabetes treatment requirements may need to be increased.
- As steroids are reduced, there is a risk of hypoglycaemia for those patients taking oral hypoglycaemics or insulin. Blood sugars must continue to be monitored on a daily basis. Patients may no longer require oral hypoglycaemics or insulin when steroids are discontinued.

### **Reducing/Discontinuing Steroids**

- If taking < 4mg Dexamethasone daily, for less than 3 weeks, steroids can be stopped abruptly. A gradual reduction may be indicated to reduce risk of symptom recurrence.
- If taking dexamethasone for longer than 3 weeks or at a higher dose than 4mg daily, a gradual reduction is indicated. This reduces the risk of symptom recurrence, but also gives time for intrinsic production of steroids to recommence:

- |   |
|---|
| <ul style="list-style-type: none"><li>○ For doses over 2mg daily, reduce by 2mg every 5-7 days</li><li>○ For doses less than 2mg daily, reduce by 0.5mg every 5-7 days.</li></ul> |
|---|

- If problems occur during dose reduction, consider increasing dexamethasone back to dose at which symptoms were controlled. Each case should be considered individually.

### **Ongoing review/patient in community**

- Complete steroid monitoring sheet.
- Provide ongoing advice to health care professionals involved in monitoring and adjustment of steroid doses.
- Contact diabetes specialist nurses for ongoing community support for patients with steroid induced diabetes or those with known diabetes who have experienced worsening of blood glucose control secondary to corticosteroids.

### **End of Life Care**

Consider each patient individually. In some cases it may be appropriate to continue with steroids via the subcutaneous route even when patient is commenced on the Liverpool Care Pathway.

### **References**

1. Kumar & Clark 1998. Clinical Medicine. 4th Edition. Chapter 16 pages 940-48.
2. Husbans E. Use of Corticosteroids. St Michael's Hospice Clinical Care Guidelines 2006.
3. Pain & Symptom Control Guidelines. Greater Manchester & Cheshire Cancer Network. Fourth Version 2006.
4. Wigan Borough Palliative Care Pain and Symptom Control Guidelines. Version 1 2007.
5. Cambridge and Huntington Palliative Care Group. Use of Steroids in Palliative Care. Available at: <http://www.arthurrankhouse.nhs.uk/>
6. Twycross et al 1998. Palliative Medicine Formulary. 1<sup>st</sup> Edition.
7. Relative potency of the main corticosteroids. Available at: [http://www.pharmacorama.com/en/Sections/CRH\\_ACTH\\_corticosteroids\\_2\\_3.php](http://www.pharmacorama.com/en/Sections/CRH_ACTH_corticosteroids_2_3.php)
8. Merseyside & Cheshire Palliative Care Network Audit Group: Standards and Guidelines, 3<sup>rd</sup> edition 2006