MANAGEMENT OF URETERIC OBSTRUCTION

PURPOSE
The appropriate management of ureteric obstruction in addition to a malignant condition

BACKGROUND
Pelvic malignancy represents the second most common cause of extrinsic obstructive uropathy in women. Squamous cancer of the cervix most frequently involves the urinary tract and ureteric obstruction is the most common cause of death amongst these women, accounting for at least 50% of cases.¹ Ureteric obstruction usually occurs at the distal ureter due to external compression from tumour bulk or nodal metastases.

KEY POINTS
1. Decisions regarding whether the obstruction should be reversed in recurrent or treatment refractory disease are complex and should be made in consultation with the treating gynaecological oncology team.
2. Bilateral ureteric obstruction results in rapidly progressive uraemia with a reduction in consciousness and death.

DIAGNOSIS

HISTORY
Patients may present with
- No symptoms but a dilated kidney and ureter found on imaging.
- Unilateral / bilateral flank and lower abdominal pain.
- Nausea associated with uraemia
- Oliguria or anuria
- Decreased consciousness due to kidney failure.

EXAMINATION
- Commonly renal angle tenderness

INVESTIGATIONS
- Electrolyte imbalance, elevated urea and creatinine (be aware of pre-existing renal impairment and acute renal impairment due to poor fluid intake or other causes).
- Renal ultrasound will demonstrate dilated calyces and proximal ureter, thinning of the renal cortex may indicate long standing obstruction (or another process such as diabetic nephropathy).
- Non contrast CT scan may show the approximate level of the obstruction but definition is limited (contrast is usually avoided due to the risk of worsening kidney failure).
- A retrograde pyelogram.
- MRI to distinguish between fibrosis and tumour.
• MAG 3 renal scan to determine renal function

TREATMENT OPTIONS

• If the prognosis is measured in hours to days prior to the onset of this problem, this is a clinical diagnosis only. No further investigations are required. Pay attention to symptom control and patient comfort. Watch for seizures and myoclonic jerks.

• If the prognosis is measured in weeks to months prior to the onset of this problem
  o Cystoscopy with retrograde ureteric stenting
  o Antegrade stenting
  o Percutaneous nephrostomy

MANAGEMENT

• Consultation with the gynaecology oncology and urogynaecology teams.
• Manage hypercalcaemia until interventions to reverse the obstruction occur.
• Close monitoring and correction of unregulated loss of water and electrolytes.
• Morphine, oxycodone and hydromorphone doses should be reviewed, titrated or given less frequently as there may be a rapid accumulation of the parent drug and metabolites, which could lead to encephalopathy and agitation.
• If the opioids in use are methadone or fentanyl, there is less risk of toxicity in renal impairment, but monitoring of analgesia and opioid therapy is still necessary.
• Monitor the dosage of neuropathic pain medications especially pregabalin and gabapentin.
• Ureteric obstruction may be caused by tumour oedema and dexamethasone (4mg orally daily) can partially reduce the obstruction.

REFERENCES (STANDARDS)
Greater Metropolitan Clinical Taskforce. 2008. Gynaecological Cancer Palliative Care. NSW. Department of Health. Australia

National Standards – 1 Clinical Care
Legislation - Nil

Related Policies – Palliative Care
Other related documents – Nil

RESPONSIBILITY
Policy Sponsor: Palliative Care Consultants
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