Extracts from The British Pain Society *Cancer Pain Management* publication

The following two articles are an extract from The British Pain Society's *Cancer Pain Management* publication.

EXECUTIVE SUMMARY:

- It is recognised that the World Health Organisation (WHO) analgesic ladder, whilst providing relief of cancer pain towards the end of life for many sufferers worldwide, may have limitations in the context of long-term survival and increasing disease complexity. In order to address these weaknesses, it is suggested that a more comprehensive model of cancer pain management is needed that is mechanism-based and multimodal, using combination therapies including interventions where appropriate, which is tailored to the needs of an individual, with the aim of optimising pain relief while minimalising adverse effects.
- The neurophysiology of cancer pain is complex: it involves inflammatory, neuropathic, ischaemic and compression mechanisms at multiple sites. A knowledge of these mechanisms and the ability to decide whether a pain is nociceptive, neuropathic, visceral or a combination of all three will lead to best practice in pain management.
- People with cancer can report the presence of several different anatomical sites of pain, which may be caused by the cancer, by treatment of cancer, by general debility or by concurrent disorders. Accurate and meaningful assessment and reassessment of pain is essential and optimises pain relief. History, examination, psychosocial assessment and accurate record keeping should be routine, with pain and quality of life measurement tools used where appropriate.
- Radiotherapy, chemotherapy, hormones, bisphosphonates and surgery are all used to treat and palliate cancers. Combining these treatments with pharmacological and non-pharmocological methods of pain control can optimise pain relief, but the limitations of these treatments must also be acknowledged.
- Opioids remain the mainstay of cancer pain management, but the long-term consequences of tolerance, dependency, hyperalgesia and the suppression of the hypothalamic/pituitary axis should be acknowledged and managed in both non-cancer and cancer pain, in addition to the well-known side-effects such as constipation. NSAIDs, antiepileptic drugs, tricyclic antidepressants, NMDA antagonists, sodium channel blockers, topical agents and the neuraxial route of drug administration all have their place in the management of complex cancer pain.
- Psychological distress increases with the intensity of cancer pain. Cancer pain is often under-reported and under-treated for a variety of complex reasons, partly due to a number of beliefs held by patients, families and healthcare professionals. There is evidence that cognitive behavioural techniques that address catastrophising and promote self-efficacy lead to improved pain management. Group format pain management programmes could contribute to the care of cancer survivors with persistent pain.
- Physiotherapists and Occupational Therapists have an important role in the management of cancer pain and have specific skills which enable them to be both patient-focused and holistic. Therapists utilise strategies which aim to improve patient functioning and quality of life, but the challenge remains for

them to practice in an evidence-based way and more research is urgently needed in this field.

- Patient selection for an interventional procedure requires knowledge of the disease process, the prognosis, the expectations of patient and family, careful assessment and discussion with the referring physicians. There is good evidence for the effectiveness of coeliac plexus neurolysis and intrathecal drug delivery. Despite the limitations of running randomised controlled trials for interventional procedures in patients with limited life expectancy and severe pain, there is a body of evidence of data built up over many years that supports an important role for some procedures, such as cordotomy. Safety, aftercare and the management of possible complications have to be considered in the decision making process. Where applied appropriately and carefully at the right time, these procedures can contribute enhanced pain relief, reduction of medication use and markedly improved quality of life.
- There is a weak evidence base for the effectiveness of complementary therapies in terms of pain control, but they may improve wellbeing. Safety issues are also a consideration in this area.
- Patients with cancer pain spend most of their time in the community until their last month of life. Older patients and those in care homes in particular may have under-treated pain. Primary care teams supported by palliative care teams are best placed to initiate and manage cancer pain therapy, but education of patients, carers and healthcare professionals is essential to improve outcomes.
- Surgery, chemotherapy and radiotherapy are cancer treatments that can cause persistent pain in cancer survivors, up to 50% of whom may experience persistent pain that adversely affects their quality of life. Awareness of this problem may lead to preventative strategies, but treatment is currently symptom based and often inadequate.
- Management of acute pain, especially post-operative pain, in patients on high dose opioids is a challenge that requires in-depth knowledge of pharmacokinetics and the formulation of a careful management plan to avoid withdrawal symptoms and inadequate pain management.
- Chronic pain after cancer surgery may occur in up to 50% of patients. Risk factors for the development of chronic pain after breast cancer surgery include: young age, chemo and radiotherapy, poor post-operative pain control and certain surgical factors. Radiotherapy induced neuropathic pain has become less prevalent, but can cause long-standing pain and disability.
- Patient education is an effective strategy to reduce pain intensity.
- Cancer pain is often very complex, but the most intractable pain is often neuropathic in origin, arising from tumour invasion of the meninges, spinal cord and dura, nerve roots, plexuses and peripheral nerves. Multimodal therapies are necessary.
- The management of cancer pain can and should be improved by better collaboration between the disciplines of oncology, pain medicine and palliative medicine. This must start in the training programmes of doctors, but is also needed in established teams in terms of funding, time for joint working and the education of all healthcare professionals involved in the treatment of cancer pain.
- The principles of pain management and palliative care for adult practice are relevant to paediatrics, but the adult model cannot be applied directly to children.