Saturday 5 June 2004

EAPC Research Forum Highlights

3rd Forum of Research Network of the European Association for Palliative Care (Onlus)

EAPC

Opioid Response – from the Lab to the Bedside

Translating lab data into applications for clinical practice was the focus of this educational session on Saturday morning.

Anthony Dickenson, of University College London, United Kingdom, began the session with a discussion of his research into the molecular mechanisms of neuroexcitation. Following tissue damage, there are important changes in the peripheral nerves, explained Dickinson, and the signalling systems of nerves alter. Neurotransmitter release increases after tissue damage and nerve damage, "so opioids will have to work better to achieve analgesia." There are various actions that compromise the efficacy of opioids, and these require a pharmacological approach that targets both pre- and post-synaptic receptors. Dickinson described a "loop" between spinal cord and brain, wherein signals are sent from the spinal cord to both the sensory and emotional pain processing areas in the brain. The brain's emotional response to pain and sensory processing creates a cycle for increased pain response. He suggested that combining agents and methods of administration or release shows potential for increasing their analgesic effects.

Eduardo Arcuri, of Istituto Regina Elena, Italy, looked at the role of immune response in pain sensitivity. Bone cancer pain is not caused by a single factor, but multiple factors involved in generating and maintaining this pain. "Cross-talk" between nociceptive and neuropathic transmitters may be responsible for increased pain behaviours in hyperalgesia. Research suggests that tumours "steal" opioids and recycle pain, Arcuri noted, and it is crucial to identify both specific tumours and their reaction to different opioids. Opioids and the route of adminstration should be rotated where hyperalgesia is suspected, he suggested.

Sebastiano Mercadente of La Maddelena Cancer Centre, Italy, discussed factors affecting opioid responsiveness. He noted that opioids, intended to abolish pain, can unexpectedly produce abnormal heightened pain sensations. Opioid response is likely to be a manifestation of disease, Mercadente suggested, as surprisingly few cancer patients present signs of allodynia (compared to chronic pain patients). Mercadente also looked at the role of combining agents to reduce opioid doses and reverse opioid tolerance in patients potentially at-risk for adverse side effects. He noted that opioid "semi-switching" could be a new approach to reduce escalating doses, but that a better understanding of molecular mechanisms is necessary.

Clinical Interview Best for Assessing Pain in Cognitively Impaired Patients

Assessing cognitive impairment is always difficult, but for ordinary clinical practice the clinical interview is still the preferred method, according to Jon Havard Loge, Ullevaal Hospital, Norway.

Loge considers that behavioural observation is the best way of assessing the severely impaired, but pointed out that it was difficult to be sure that the changes seen were due to pain and not some other form of distress. "Self-report is probably the ideal way in those with a mini mental state exam score of >18, but the appropriateness of other methods in terms of diagnostic capabilities is still uncertain."

Quality of Life is Whatever the Patient Says it is

There is no 'gold standard' method of assessing quality of life (QoL) in palliative care. Claudia Bausewein, St Christopherus Hospice, Munich, Germany, explained that choosing the method of assessing a patient's quality of life depends on whether the intention is to improve symptom control or to improve the overall impact of palliative care.

Health related QoL is exemplified by measures such as the Sickness Impact Profile and the Short Form-36, but these will not necessarily reflect the individual's perception of QoL accurately.

"We have found that the QoL does not necessarily decrease with severe illness- the so-called disability paradox, and there is a failure to acknowledge the specific weight that an individual attaches to spiritual and psychosocial issues."

Challenges and Solutions in Palliative Care Clinical Research

Despite the difficulties involved, all speakers in this session were convinced that the benefits of conducting research outweigh the many clinical and ethical challenges.

Staffan Lundstrom, Stockholms Sjukhem, Sweden, explained how setting up a palliative care research network in Sweden has helped overcome the problem of few patients in any one trial. This is a common problem in palliative care and can mean that significant findings are difficult to achieve.

The Swedish network started in 2002 and now involves units with a total of 1,300 patients. Lundstrom explained that to test the network, the pilot question concerned the occurrence of hiccoughs of patients in palliative care. 250 patients were included in the study, which revealed that 13% had hiccoughs and the majority of these patients had gastrointestinal tumours. A second survey showed that nearly half (47%) of the breast cancer patients and at least a third of those with lung cancer and GI cancer had received palliative chemotherapy. A third survey on EPO and blood transfusions that included 1046 patients found that nearly 13% were given EPO.

The network hub is a web-based data entry and report site made accessible to all participating units.

"The network is successful and growing all the time and hopefully it will be a national network very soon. The growing numbers of patients on the database means that we can get some significant answers to our questions. Our next set of questionnaires will look at the use of corticosteroids and issues of hydration and parenteral nutrition."

Information on the network can be obtained from: **www.panis.se**

Need to Develop Better Assessment Tools for Pain

Pain should be assessed on a daily basis and pain measurement tools should be as simple as possible, said Friedemann Nauck, Malteser Hospital, University of Bonn, Germany.

Nauck recommends a ladder approach to pain assessment with those with 'non-complicated pain' assessed using verbal, visual and numerical rating scales. Those who have a numerical rating scale of >5 will probably require more sophisticated assessment tools such as the Brief Pain Inventory and the McGill Pain questionnaire. Observer assessment is also important in those with complex pain needs.

"There continues to be a need to develop valid, reliable and simple assessment methods for the patients who are unable to communicate their pain."

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Effects of Spiritual Care Training for Palliative Care Professionals

Saturday morning's EAPC New Research Data Session, chaired by Geoffrey Hanks, University of Bristol, UK, and Marit Jordoy, Faculty of Medicine, NTNU, Netherlands, focused on Health Services research in palliative care, specifically on evaluation of services and defining palliative care programmes and patient population.

Mariar Wasner, Ludwig-Maximilians University, Germany, discussed the effects of spiritual care training for palliative care professionals, presenting on the results of a study evaluating a 3.5 day training course based on Tibetan Buddhist Traditional methods, with a non-denominational scope. The "Wisdom and Compassion in Care for the Dying" course, attended by 63 participants, was evaluated by means of a questionnaire, revealing a significant improvement in self-perceived compassion for the dying, a reduction in work related stress and in attitudes towards colleagues.

Room for Improvement in Palliative Care Research

The EAPC Research Forum continues to attract more and more delegates since the first conference in Berlin in 2000. This year there have been more than 800 people from 39 countries at the Conference, and more than 300 abstracts have been presented.

But there is still a need for extended national and international research programmes, according to Stein Kaasa, Pain and Palliative Care Research Group, Faculty of Medicine, Norway. Kaasa called for a number of improvements to palliative care research. These included the need to:

- Agree on an advocate for palliative care research
- Educate researchers
- Collaborate across specialities
- Offer appropriate funding to palliative care research
- Appoint professional leaders in palliative care research
- Strengthen international collaboration – e.g. through the EAPC network

Gaining funding is vital for good research and Kaasa pointed out that we should look to the Canadian experience for inspiration. A palliative care pilot project has successfully attracted CAD$100,00 and this year the Canadian Government has announced further funds of between $5-7million. "We should also all try to ensure that palliative care is represented at all local and national research forums, and it is essential to promote the importance of including palliative care within the 7th EU Framework."

Opioids: Respiratory Depression and Immunosuppression

Opioids affect respiratory function to a greater or lesser extent, but new data on buprenorphine suggest that it has limited effects on respiratory function, and compared to fetanyl, these effects do not appear to be dose dependent.

Albert Dahan, Leiden University Medical Centre, The Netherlands, who was presenting the data at a sponsored symposium Current Standards in Palliative Care- The Role of Transdermal Buprenorphine said that in studies performed in healthy young adults, at buprenorphine doses of 0.2 and 0.4mg/70kg produced the same amount of respiratory depression, despite the fact that the higher dose had triple the analgesic effect when compared with the lower dose. Patients with cancer, the elderly and those in the post-operative period are all susceptible to the immunosuppressive effects induced by morphine. However, animal data presented by Paola Sacerdote, Milan, Italy, indicates that, in contrast to morphine, buprenorphine does not affect cellular immune responses after acute intracere-broventricular (icv) administration. Professor Scerdote speculated that the reason for the lack of an immunosuppressive action in buprenorphine might be due to its lack of neuroendocrine activity. "It does not seem to activate the HPA axis or alter the release of monoamines in the spleen."

According to Professor Scerdote, opioids that appear to have an immunosuppressive effect include codeine, methadone and morphine. Oxycodone, tramadol, hydromorphone and buprenorphine all seem to be less immunosuppressive. "But even with drugs such as morphine, the immunosuppressive effects appear to disappear after long-term administration in common with other opioid side-effects such as nausea and respiratory depression."

Measurement Tools in Palliative Care

A review of measurement tools in palliative care, and the importance of moving towards a common standard was discussed in one of Saturday afternoon's EAPC education sessions, which prompted a lively debate amongst attending delegates.

Co-chair of the session Huda Huijer Abu-Saad, American Univeristy Beirut, Lebanon, began her presentation by explaining, "the EAPC is to be congratulated on the progress in measurement within palliative care". She went on to explain that whilst this progress was beneficial, in order to increase the quality of palliative care provision, measurement still needs to be develop to ensure methods are reliable, valid and clinically relevant.

Outcomes of palliative care are either patient focused (aimed at improving patient satisfaction, functional status and quality of life), or organisation centred (focusing on the quality of care provision). Improvements in the overall provision of patient care, an ability to conduct a comprehensive audit of care provision and the facility to compare different centres to evaluate efficacy and cost were described as the important factors when justifying the monitoring of outcomes in palliative care.

Abu-Saad highlighted the inherent problems associated with measuring outcomes in palliative care, for example that patients may lack the physical or cognitive function to answer questions, or may down play/exaggerate symptoms to avoid unpleasant treatments or in an attempt to alleviate their pain.

All of the EAPC Congress Highlights, including sessions from Sunday, can be downloaded at: **http://www.eapcnet.org/Research2004/forum/default.asp**

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