*from the talk by Dr. Justins, Consultant at St. Thomas' Hospital, London.

"When a lot of remedies are suggested for a disease, that means it can't be cured" (Chekhov)

Chronic pain is that which persists and often chronic conditions such as chronic fatigue, complex regional pain syndrome, repetitive strain injury etc. result in cross-specialty problems.

There tend to be patterns to the problems caused:

- Persistent, intractable pain
- Pathology not always obvious
- Prognosis unpredictable
- Associated problems...multidimensional
- Socio-economic effects...profound

For all that, it must be remembered that by and large, the value of chronic pain biologically speaking (in terms of adaptation or development) is low or nil.

Why is treatment ineffective?

This may be for a number of reasons:

1. No readily identifiable cause
2. Use of traditional medical model
3. Irrational choice of treatment

4. Single modality of treatment inappropriate
5. Lack of evidence for the treatment used

Dr. Justins referred to a study at St. Thomas' which showed that 66% of patients had received inappropriate treatment. Interestingly, the study also showed that 40% of patients had been referred to a psychiatrist.

Inappropriate treatment can, of course, make matters worse and prolong disability.

In this country, the N.H.S. rewards intervention, the pharmaceutical industry promotes drugs and equipment. Abroad, there may also be financial considerations. Certainly, drug companies may pressurise doctors to use "new" (repackaged) drugs such as opiates.

The doctor wishes to help a patient who pleads for something to be done. However, he may revert to the traditional medical model (no evidence on test results suggests a psychological problem) or he may be specialty-specific which does not facilitate a good overview of multifaceted problems.

BACK PAIN

Broadly speaking, back pain research is marred by poor methodology in most studies so it is difficult to accurately evaluate the efficacy of any one treatment.

The AHCPR (American Guidelines) has found that only 230 out of 10,317 papers demonstrated proper entry criteria, used 2 groups (control as well as cohort) and an adequate outcome.

Most are only case studies or cohort studies (or entrepreneurial enterprises!).

TREATMENTS:

- NSAIDs
- Opioids
- Antidepressants
- Anticonvulsants
- Systemic local anaesthetics (mexiletine)
- Muscle relaxants
- Central neuraxial drugs

INJECTIONS

- Epidural .....some evidence of effect in acute problems, less so in chronic*
- Neural blockade.....very weak basis for this
- Trigger point injections
- Sclerosant
- Sacro-iliac
- Facet joint
- Medial branch block

*note that this is Dr. Justin's viewpoint. The ASG do NOT advocate ANY invasive spinal procedure due to the potential to cause/exacerbate arachnoiditis.

OTHER:

- Acupuncture.....may be of short-term benefit
- TENS.....no evidence of benefit
- SCS.....Kupers et al did a national survey in Belgium of 65% who were treated for back pain, less than 5% returned to work
- Neurosurgery.....questionable rationale, limited indication
- Spinal fusion ....."No matter how severe or intractable the pain, it can always be made worse by surgery."
- Physical rest.....not advantageous for more than 7 days
- Psychological.....widely used, difficult to compare
- Prevention .....pre-emptive analgesia ....awaiting evidence

Pre-emptive analgesia..pain relief given pre-operatively to prevent upsurge of pain which may be responsible for the "wind-up"mechanism of central sensitisation.

Dr. Justins cited a Danish study of amputees; half were given epidural analgesia 1-2 days prior to amputation, these patients showed much better outcomes at 6 and 12 months with respect to symptoms such as phantom limb pain.

Dr. Eastwood, in discussion, suggested that it is logical to provide good post-operative analgesia. He said that in the 80s and 90s, recovery room (after operation) patients were often in sever pain, but since then, pre-operative analgesia has been given and substantially improved matters.

USE OF OPIATES

(from Professor Hanks' talk on "Pain relief in Cancer"..he is a Consultant at the Bristol Oncology Centre)

Professor Hanks began his talk by asserting that about 80% of cancer patients can have their pain relieved with a simple pharmacological approach using orally administered analgesics and adjuvants.

Continuous pain requires continuous medication. Unstable pain should be treated with short-acting opiates. Treatment of adverse effects will allow the analgesic dose to be titrated to an adequate level.

It is essential to individualise the dose, especially if using strong opioids, but overall, there should be simplicity in the choice of analgesics and the route of administration.

Orally administered morphine is an excellent analgesic and remarkably safe, but was not widely used until recently. There is a spectrum of sensitivity to opioid analgesia that ranges from pain

that is readily treated with opiates through to opiate-resistant pain.

Unfortunately, neuropathic pain is poorly responsive to opiates, as are some forms of visceral pain (including perineal pain).

The subjects of toxic opioid metabolites and paradoxical pain are controversial. The concept of "opioid rotation" is now viewed as a fashionable notion and has more recently been replaced by the term "opioid switching".

This refers to the practice of changing from one opiate drug to another to reduce the incidence or severity of side-effects such as muscle spasm, nausea and vomiting, sedation, cognitive problems.

Professor Hanks contends that a third to a half of patients do not feel sick if given oral morphine, so routine antiemetics (anti-sickness drugs) are not necessary.

Sedation is a very common but only an initiation side-effect: as the drug is continued, so tolerance to the side-effects (but not the pain-relieving effects) develops.

Once stabilised, the patient tends not to be either excessively sedated or significantly cognitively impaired (indeed there may be some improvement in cognitive function as pain can interfere significantly with thinking ability)

Respiratory depression is not a problem if the dose is titrated against the level of pain relief as pain acts as a respiratory stimulant and a physiological antagonist to central nervous system depression.

Pain seems to actually alter the pharmacodynamics of morphine (i.e. the way the drug works on the body)

Oral morphine doses range from 15-30mg per day right up to 15g/ day or more.

Alternatives to morphine:

- Buprenorphine (Temgesic)
- Dextromoramide(Palfium)
- Dipipanone (Diconal)
- Hydromorphone (Palladone)
- Methadone
- Nalbuphine
- Oxycodone (IR=immediate release, Oxycontin=sustained release)
- Fentanyl

FENTANYL:

This is a synthetic opioid which has been used for over 30 years as an intravenous anaesthetic. It is 80-100 times more potent than morphine.

The fentanyl patch can last for up to 72 hours.

There is a new innovation, the fentanyl "lollipop": oral transmucosal fentanyl citrate (OTFC, Actiq) which is actually a lozenge that dissolves in the mouth and has a very rapid onset of action within 5-10 minutes. It lasts about 2 hours.

It will be very useful for what is known as "incident pain" e.g. pain on exercising that is not present at rest: this will also avoid too high a dose (causing side-effects) once exercise has stopped.

In summary:

"Morphine is a remarkably effective drug." (Lancet, 1995)

and if the dose is titrated properly to provide the right level of pain relief (but not too high a dose) then side-effects are minimised (once the initial treatment period is over) and risk of addiction is minimal.