Edinburgh Research Explorer

Paradoxical pain

Citation for published version:

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Publisher's PDF, also known as Version of record

Published In:
British Medical Journal (BMJ)

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and/or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 06. Oct. 2023
Relation of birth variables to death from cardiovascular disease

EDITOR—D J P Barker and colleagues' study puts a further nail in the coffin of those who doubt that the intrauterine environment influences later health—in this instance, death from cardiovascular disease. A theme running through the Smith et al's paper and others on this topic is that maternal nutrition is primarily responsible for reduced prenatal growth. Though there can be no doubting the importance of maternal malnutrition as a cause of reduced fetal growth in poor countries and underfeeding of pregnant women in the developed world, there is no evidence that the influence of the intrauterine environment is any less important in the central nervous system. Pain associated with inflammation is a typical example of peripheral sensitisation, hence the need to use a non-steroidal anti-inflammatory drug in most patients with painful soft tissue or bone metastases. Morphine alone is often inadequate, but there is nothing paradoxical about this. Central sensitisation may also occur in such cases as part of a secondary "wind up" phenomenon in the dorsal horn. Occasionally this is a specific consequence—for example, with an N-methyl-D-aspartate receptor blocker such as ketamine. Central sensitisation in neuropathic pain is more complex and, as Bowsher points out, demands a range of alternative measures.1

D P DAVIES JMATTHEWS

Department of Child Health, University College of Medicine, Cardiff CF4 4XN


Paradoxical pain

EDITOR—David Bowsher defines paradoxical pain as pain in a patient who has opted for an alternative definition. Paradoxical pain is a new and confusing term that has been defined in different ways. David Bowsher describes it as nociceptive pain that is not receptive (does he mean responsive?) to opioids.1 Yet in an earlier publication, in which the term was first coined, he and his colleagues used it to describe "pain that is not relieved or is worsened by further administration" of morphine or diamorphine (our italics).2 We have not seen any patients whose physical pain has been made worse by morphine or diamorphine, nor are we aware of any good evidence that this occurs. More importantly, we fear that the suggestion that this may happen may deter some doctors from giving adequate doses of these drugs when they are properly indicated.3

It is well recognised that opioid analgesics do not always relieve pain, and there are already several unsatisfactory ways in which such pain is described, including "opioid insensitive," "opioid non-responsive" and "opioid resistant." As we have written elsewhere, these terms have subtle differences in meaning, which are partly semantic but partly reflect different views.4 The introduction of yet another term will add confusion. We believe that what has been described as paradoxical pain is what we would refer to as "opioid poorly responsive" pain and that opioid responsiveness is a continuum that may be influenced by any of a large number of factors related to the patient and the drug as well as the pain. The pharmacokinetics of morphine may provide at least part of the explanation, but there are too few data to justify the editorial's subheading (morphine 3-glucuronide does not, by the way, bind to opiate receptors).

CAROL J. DAVIS ROSE TURNER

Palliative Care Unit, Royal Marsden Hospital, Sutton, Surrey SM2 9PT

1 Bowsher D. Paradoxical pain. BMJ 1993;306:473-4. (20 February.)

In 1967 Cicely Saunders described the concept of total pain, which encompasses the psychological, emotional, and spiritual turmoil of some patients with severe pain. Might this be what Bowsher refers to as overwhelming pain?1

G W HANKS W M O'NEILL M FALCON

United Medical and Dental Schools, Division of Oncology, Department of Palliative Medicine, St Thomas's Hospital, London SE1 7EH


EDITOR—David Bowsher's editorial oversimplifies a complex and contentious issue.1 Paradoxical pain may well exist but is neither well documented nor common; it does not account for the majority of cases of uncontrolled pain, and we are not aware of any evidence that it was an important factor in the care of the patient in the recent highly publicised court case.2

The hypothesis that paradoxical pain is caused by abnormal metabolism of morphine is plausible but built on shaky foundations. The evidence in rats that morphine 3-glucuronide may antagonise the analgesic actions of morphine is unsubstantiated and is hard to explain given that morphine 3-glucuronide has a much lower binding affinity for opioid receptors than either morphine or the active metabolite, morphine 6-glucuronide.3 Furthermore, large interspecies variations exist not only in the metabolism of morphine but also in the distribution of opioid receptors.4 Thus animal data on this subject cannot, and should not, be extrapolated to humans and many questions remain.

Though recognition of this potential therapeutic problem is welcome, until the clinical importance of the morphine metabolites in humans is completely understood these rare cases of paradoxical pain will remain unexplained.

CAROL J. DAVIS ROSE TURNER

Palliative Care Unit, Royal Marsden Hospital, Sutton, Surrey SM2 9PT

1 Bowsher D. Paradoxical pain. BMJ 1993;306:473-4. (20 February.)
7 Kayazawa H, Tei K, Yoneda H, Igarashi H, Morley TWYCROSS ROBERT.