



Editorial comment

Pain management with buprenorphine patches in elderly patients: Quality of life—As good as it gets?



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In this issue of *Scandinavian Journal of Pain*, Norrlid and coworkers [1] report on pain management with buprenorphine patches in persistent, non-malignant pain in patients aged over 50 years. In their study, data on health related quality of life (HRQoL) from published studies [2–5] were analysed.

In their analysis, altogether 401 patients with moderate to severe pain from osteoarthritis of the knee and hip, completed EQ-5D questionnaires before (baseline) and 3–6 months after titration with buprenorphine patches. In spite of the questionnaire's apparent simplicity, EQ-5D allows for 243 different levels of HRQoL, from perfect health to death [1]. Following titration with buprenorphine patches, HRQoL improved, although a number of included patients, up to 30%, discontinued due to side effects.

The cost for a year of analgesic management with either buprenorphine patches in a dose of 10–15 µg/h and/or full dose of paracetamol/acetaminophen alone (up to 4 g/day) was calculated. The cost of health care visits, extrapolated from three up to 12 visits per year, was added to the total cost of care.

Ideally, patients increase activity and thus quality of life, as a consequence of improved pain control. What is acceptable and clinically significant pain relief to a patient and thus improvement of HRQoL, on an individual basis and in a larger group of individuals? How much is this worth to the elderly patient suffering from moderate pain due to osteoarthritis and how much is it worth to society? Interview studies from the UK and from Sweden have arrived at different numbers [1]. Both Swedish and UK weights were used by Norrlid et al. [1] in order to compare the incremental cost effectiveness ratios (ICER) of buprenorphine patches to pain management by paracetamol only.

Irrespective of which weights were used, analgesic management with buprenorphine patches was cost effective, but the Swedish weights produced a larger cost per Quality Adjusted Life Years (QALY) than the UK – weights did. The payer, in this case the National Board of Health and Welfare (NBHW) of Sweden, decides what is an acceptable upper limit for the cost of QALY, although there are not, as Norrlid et al. point out, general guidelines for the worth of QALY.

The recommended maximum dose of paracetamol or acetaminophen for elderly patients is given as 3 g/day [6]. However, paracetamol 4 g/day may be prescribed to, or used by, elderly patients, due to the difficulty to achieve a satisfactory pain control in this age group where the use of NonSteroidal Anti Inflammatory Drugs (NSAIDs) and/or potent opioids may be problematic due to contraindications, side effects or both [6].

The additional cost for antiemetics and laxatives were not regarded in the present analysis, although these adjuvants may be necessary to achieve an improvement of QoL, which thus would add to the estimated yearly cost of treatment. However, the cost for emergency calls due to unrelieved pain was not brought into the analysis either. The cost for healthcare of patients with unrelieved chronic pain is higher than for patients with no pain [7]. Moore et al. [7] argue in their systematic review that “effective pain management represents value for money”.

The authors should be commended for their effort to analyse already available data in order to gain new knowledge. Elderly individuals are increasing in society [8]. Pain is common in the elderly [6,8], more so in elderly in residential living, compared to elderly subjects living in their own homes. Elderly individuals, compared to younger subjects, have a greater incidence of conditions like cancer, diabetes, and musculoskeletal problems which are associated with pain [6].

An elderly patient with pain needs an individualised pain management plan where the clinician can make a choice of available therapies best suited to obtain pain relief. The clinician should make the choice of therapeutic intervention based on patient interview, careful clinical examination and pain analysis rather than on cost of QALY. However, the worth of QALY decides which therapies are available, to the patient and the clinician, since reimbursement of treatment is decided on the basis of cost effectiveness data, in Sweden by the Pharmaceutical Benefits Board (TLV). It is difficult to individualise pain management if only the cheapest pharmaceutical drugs are reimbursed and thus offered to the elderly patient by their physician.

It can be argued that we do not know if the improvement in QoL is sustained during long term treatment with buprenorphine. We do know that a large number of adult patients with chronic non-cancer pain discontinue opioids due to side effects, but also due to lack of analgesic effect [9].

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However, in an elderly, frail patient with concomitant diseases, a reduced renal function and opioid sensitive pain, buprenorphine patches may be a good choice. Buprenorphine does not need to be dose adjusted in patients with reduced renal function and side effects may be manageable considering the fairly low dose, 5–20 µg/h [6,8]. In elderly frail patients the problem is not that there are an abundance of analgesic possibilities, rather the clinician is faced with just a few therapeutic options.

Davis [10] gave twelve reasons to consider buprenorphine as a frontline analgesic for pain management. Norrlid et al. [1] have now shown that well monitored analgesic management with buprenorphine patches is cost effective which adds another good reason to use buprenorphine patches for moderate to severe opioid sensitive pain in elderly patients.

Conclusion

Pain management should be individualised in order to obtain optimal pain control and a minimum of side effects. Non-pharmacological and pharmacological treatments should be combined to obtain these results. The cost of the offered care is also important for the patient, the caregiver, and for society. Pain management with a significant analgesic effect that is possible to measure as a an improvement of quality of life is not only successful, but may also be cost effective for both the individual and for society. Norrlid et al. [1] have convincingly shown that in a larger group of patients over 50 years of age, treatment with buprenorphine patches is cost effective, compared with paracetamol full dose, for moderate to severe pain caused by osteoarthritis of the knee and hip.

Conflict of interest

Dagmar Westerling has been consultant to the companies Almirall, Astellas, Grünenthal and Mundipharma.

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