

Guest editorial

Hip and knee replacement—do we need to bother about psychiatry?

In the present issue of *Acta Orthopaedica*, Gylvin et al. (2016) present a narrative review on the negative effects of psychiatric medication and psychiatric disease on the perioperative course and long-term outcome after knee or hip replacement. They also refer to their own experience from a recently published study of 8,757 procedures, which is one of very few prospective studies in this area (Jorgensen et al. 2015). That study found psychiatric disease/psychopharmacological treatment to be a risk factor for postoperative morbidity (mainly leading to prolonged hospital stay and more frequent re-admissions) after fast-track knee or hip replacement. Mortality related to surgery was 0.7% in patients with psychiatric disease and 0.2% in patients without. This increased morbidity and mortality may be due to psychiatric disease per se and/or drug-related side effects.

Also in this issue of *Acta Orthopaedica*, Greene et al. (2016) present an extensive retrospective study of 9,092 Swedish hip replacement patients, about 10% of whom used antidepressive drugs in the year before surgery. These patients had more problems (e.g. pain, reduced quality of life), both before surgery and 1 year after, than those who did not use antidepressants. However, the numerical improvement in outcome scores as a result of surgery was fairly similar between groups.

These 3 papers raise 2 important questions: (1) Is psychiatric disease/treatment a contraindication for major joint surgery; and (2) Will successfully performed surgery be of benefit in relieving symptoms in psychiatric patients?

The first question is addressed by the simple, but still useful, ASA classification from I–IV for elective surgery: an otherwise fully healthy patient (i.e. ASA I) or a patient with minor health problems (i.e. ASA II) may be submitted directly for surgery (Schilling and Bozic 2016). ASA III or IV patients (i.e. those with severe systemic diseases) need special precautions, preparation, or sometimes even advice on abstaining from surgery and anesthesia, due to the high degree of risk relative to the possible gain (White et al. 2012).

The discussion on psychiatric medication in Gylvin's paper is an important reminder to also include psychiatric drugs in the preoperative evaluation of drugs that may require perioperative precautions. An important consideration is the relatively poorly known anti-thrombotic effect of selective serotonin re-uptake inhibitors (SSRIs) (Gahr et al. 2015). This is relevant because the modest possibility of bleeding from the SSRIs may add to similar effects of traditional NSAIDs, ace-

tylsalicylic acid, warfarin, and the new oral anti-thrombotics, which are being used by an increasing (and high) number of patients.

Even so, issues of concomitant disease and medication are usually straightforward to handle and solve when properly recognized. Today, serious perioperative injury or death in properly handled elective patients is very rare.

The second question concerns the increasing cost-benefit discussions on 2 considerations related to surgery in general, and also specifically to joint replacement: “Would non-surgical treatment, i.e. exercise, physiotherapy, weight reduction, drug therapy etc., be a better alternative than surgery?” and “Apart from the impact on general health per se, are there issues concerning patient ability, motivation, and skills that would be crucial for a successful result of surgery?”

The focus of the papers from Gylvin et al. and Greene et al. is on this second important issue. We are already in the process of demanding that patients should take more responsibility for their own surgical results, rather than just being passive recipients of a technically highly demanding operation. We know that post-discharge considerations about medical compliance, and about attitudes and skills in self-exercise and training, must be stressed to the patient in order to get an optimal outcome. We are starting to look at the ethically sensitive issue of making weight reduction (Liu et al. 2015)—and/or stopping smoking—a prerequisite for performing surgery at all in some patients (Singh et al. 2015). This does not have to do with moralism, but merely with the fact that if you are heavy, are not exercising, and/or smoke, the result of surgery will be less favorable. The cost-benefit ratio of doing surgery may be above the limit that society is willing to accept.

The discussion on psychiatric disease must take place in this context. As pointed out by Gylvin et al. (2016), severe psychiatric disease may be an even stronger predictor of unfavorable long-term surgical outcome than severe cardiopulmonary disease. In the present situation in society, with ever-growing and expensive options of treatment, including surgery, for many health problems, this fits into the discussion on limiting parts of expensive healthcare to those who will reap the best benefit from a given procedure.

Still, there are issues to be addressed before jumping to conclusions about not performing surgery because of psychiatric disease. One is that even though studies, including that of Green et al., show less favorable orthopedic surgery results

in psychiatric patients as a group when compared to others, this should not preclude us from making an individual evaluation in each patient. The question concerning any individual patient is whether he or she will benefit overall from surgery (Rolfson and Malchau 2015), and not just whether the amount of benefit is more or less than on average.

This has to do with the prognosis when surgery is ruled out: will the patient's orthopedic problems, e.g. pain and functional limitations, worsen, and also, will the psychiatric disease be worse to handle if the patient also has a severe orthopedic problem?

There are prospective data to support the idea that patients with severe depression do worse in their depressive state if they also suffer from pain (Kroenke et al. 2011). It may even be that the orthopedic lesion is part of the psychiatric problem, or even the cause of problems. Pain, heavy use of painkillers, and physical constraints in everyday activity are known in some cases to be major initiators of psychiatric problems (Borges et al. 2015). Also, psychiatric disease may be a temporary issue. In a prospective study of untreated unipolar depression, Posternak et al. (2006) found significant spontaneous improvement in the condition over several months of observation.

Until now, the issue of psychiatric disease being an important consideration in our evaluation of patients for possible orthopedic surgery has been underestimated. The issue should be brought up when meeting the individual patient and also in further discussions and future efforts in research, which would include tackling ethical concerns and priority making.

The papers by Gylvin et al. and Greene et al. are important early steps on this road. Large-scale prospective studies will be needed before we can make firm conclusions about cause and effect relationships in an area with many complex confounders.

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