

NOW AVAILABLE
Xarelto[®]
rivaroxaban tablets

Learn More ▶▶▶▶

Important Safety Information | Full US Prescribing Information

Important Safety Information

BOXED WARNING: SURGICAL SETTINGS –
SPINAL/EPIDURAL HEMATOMA

ORTHO SuperSite[®]

Patients' emotional health plays an important role in functional results

Although orthopedic surgeons provide interventions to improve quality of life and physical activity, the **emotional health** of patients may be a key component in determining the quality of function after surgery.



[Discuss in OrthoMind](#)

"Multiple authors in the orthopedic literature over the past 5 years have shown that a patient's emotional health influences his or her functional recovery after surgery," David C. Ayers, MD, director of the Musculoskeletal Center of Excellence at the University of Massachusetts Medical School and the Pappas Chair of the Department of Orthopedics and Rehabilitation, told *Orthopedics Today*.

Story continues below ↓

ADVERTISEMENT

NEW!

1-4 week lead times!

**Anterior Approach
MIS Broach Handles**

with unique double offset

ORTHO GROUP

www.orthogroup.com

call **800-709-4127**

The advertisement features a central image of two surgical broach handles, one in a light blue color and one in a dark grey color, both with curved, serrated ends. The text is arranged around the image, highlighting the product's new status, lead time, and unique design.

The link between patients' emotional status and outcomes has been highlighted in orthopedic areas such as spine, trauma, sports medicine, joint reconstruction and upper extremity surgery. "Patients with lower emotional health have a greater risk of less functional improvement after surgery," Ayers said.

Patients at risk for low emotional health span traditional patient demographics, such as age, gender or socioeconomic background.

"However, patients at risk tend to be anxious, have low grade depression, less coping skills and less social support ...," Ayers, who is also chair of the department of orthopedics at the medical school and UMass Memorial Medical Center, said. "In general, though, these are not people who are undergoing clinical treatment for depression, but have a low-grade **chronic depression**."

The patients may also lack coping skills and have a tendency toward poor social support, he said.

Patients at risk for suboptimal functional improvement after surgery due to emotional issues can be identified preoperatively, Ayers said.

“The traditional approach is for surgeons to spend time discussing areas with their patients that put them at high risk,” he said. During such encounters, emotional health is explored, including anxiety, depression and poor coping skills.

Validated patient questionnaires such as the SF-36 or SF-12 can also help identify patients at higher risk. “Patients with low [mental composite scores] MCS are at risk for less functional improvement after surgery due to their emotional health,” Ayers said. “Such patients can have a technically precise and successful operative procedure without peri-operative complication, but patients with low emotional health may still not achieve the functional improvement that the surgeon and patient expect.”

Ayers continued, “What has frustrated orthopedic surgeons is their inability to intervene in such high-risk patients, even though they can identify these patients pre-operatively. Once you identify this at-risk population, does that mean that you need to cure the depression or treat the anxiety or give them additional coping skills or improve their social support? These are areas in which most orthopedic surgeons have limited ability to intervene.”

However, once a patient is identified as high risk, Ayers said that an orthopedic surgeon may be able to improve a patient’s postoperative function by enrolling the patient in a different postoperative recovery pathway. Such a pathway may provide the patient with additional resources to address their anxiety, and provide them with additional coping skills and support above the routine postoperative pathway.

Pathway to recovery

This topic is the subject of an ongoing study funded by the National Institutes of Health (NIH) to test an emotional health program for patients undergoing total joint replacement. Nearly 200 patients are enrolled in the randomized, single-center study spearheaded by Patricia D. Franklin, MD, MPH, a professor of orthopedics at the University of Massachusetts Medical School.

“We want to offer patients the right emotional support to get them through the process,” she told *Orthopedics Today*. “Our model is to have more of a balanced rehabilitation program that not only addresses the knee, but the patients’ spirits and social support too.”

As part of the emotional health program, a telephone health counselor trained with the help of behavioral psychologist Milagros Rosal, PhD, makes 12 weekly phone calls offering emotional support to patients who show symptoms of depression and anxiety during the rehabilitation phase. The first in-take call is 40 minutes, with follow-up calls ranging from 8 to 15 minutes.

“The length of the calls is really driven by the patient and his or her needs,” Franklin said.

Prospective randomized study

The calls cover an assessment of the patient’s pain, function and goals for that week. The counselor also does problem-solving with the patient about barriers to adhering to the exercise program for the week.

“The patient might say that because I was feeling depressed, I didn’t feel like getting out of bed 3 days this week to do my home exercises or attend physical therapy,” Franklin said. “We go through strategies for motivation in the morning or strategies for doing exercises during the day, even when the patient does not feel up to it.”



David C. Ayers, MD, said orthopedic surgeons may be able to improve postoperative function of patients with low emotional health by enrolling them in different postoperative recovery pathways.

Image: Rob Carlin Photography



“Patients want to be approached as people — not diseases — and their outcomes are better when we do.”
— David C. Ring, MD, PhD

The prospective study will conclude this summer. Franklin said because the trial is randomized, she could not comment on the preliminary findings. However, she said no one dropped out of the intervention, so the patients appeared to welcome the calls. In addition, patients reported greater adherence to an exercise program when given individual contact, which may have helped with their physical gains from surgery.

Although orthopedic practices can incorporate a similar telephone program by training a staff member, Franklin and her colleagues envision the use of a professional who is associated with a rehabilitation center or insurance company.

High tech, low touch

David C. Ring, MD, PhD, director of research for the hand and upper extremity service at Massachusetts General Hospital in Boston, noted that a survey by the American Academy of Orthopaedic Surgeons (AAOS) found patients perceived orthopedists as “high-tech and low-touch.” To counter this perception, the AAOS “has promoted communication skills courses to try to improve how patients perceive us. Patients want to be approached as people — not diseases — and their outcomes are better when we do,” Ring, who is an *Orthopedics Today* Editorial Board member, said.

He cited the “mind-body dichotomy” as a large barrier to orthopedic surgeons placing more emphasis on the cognitive and emotional aspects of healing. The stigma associated with psychology is another roadblock to embracing cognitive and emotional health. “However, with society’s increasing understanding that the physical and emotional aspects of illness cannot be separated, and that stress is to be expected and should not be considered shameful, we will be able to take advantage of a wider range of options for optimizing health and wellness,” Ring said.

The power of thoughts

Ring noted a divide between subjective patient disability and objective impairment that is better explained by mood, stress and coping strategies than by pathophysiology.

“The cognitive and emotional aspects of illness are quite responsive to techniques such as cognitive behavioral therapy, which can be considered like a cognitive/emotional fitness program,” he said. “Many of us readily go to the gym, run or do yoga for our physical fitness.”

In essence, cognitive behavioral therapy allows a person to more effectively separate subjective thoughts from facts.

“A lot of problems arise when you think of something as a fact,” Ring said. “For instance, when you have a pain that does not go away as quickly as you expected, then it might become pretty convincing that the pain will never go away. The thought is, ‘This pain is never going to go away.’ Although it seems factual, it is not true. Most pains eventually go away.”

Caving into the idea that pain will never cease “is very disturbing,” Ring said. “It makes the person more ill. You feel less well. You feel less capable, and symptoms bother you more.”

In contrast, when people recognize and accept that most pain is temporary “it helps them feel more optimistic and that things are going to work out,” Ring said. “It also helps people do more and be less bothered by their symptoms.”

As the stigma of seeking psychological services decreases, Ring expects patients will sign up for cognitive/emotional fitness courses. However, he does not foresee these courses being offered by the orthopedist.

“I don’t think we can be the experts at that and the experts at musculoskeletal care,” Ring said. “Ultimately, we will need to do this as a team, which has already been accomplished in spine and other fields.”

Ring acknowledged that having a multidisciplinary approach that includes social workers, counselors or psychologists in the office can take time. Meanwhile, orthopedic surgeons should be aware of the power of words and ideas. For example, surgeons should consider the emotional content of the word “tear” when discussing rotator cuff tendinopathy with patients, which can convey that patients are damaged and need repair. Ring noted that best evidence suggests that most rotator cuff tendon defects are atraumatic.

“Calling it a tear actually feeds into people’s worst fears,” he said.



“We want to offer patients the right emotional support to get them through the process.”
— Patricia D. Franklin, MD, MPH

Models of health

Arthur J. Barsky, MD, a psychiatrist and vice chair for psychiatric research at Brigham and Women's Hospital in Boston, also highlighted the link between thoughts and outcomes.

"Clearly, people's thoughts about their symptoms, their attitude toward their illness and their expectations about the future course of their disease have tremendous influence on people's functional status," Barsky told *Orthopedics Today*.

Barsky, who has been principal investigator of several NIH studies that evaluated the role of [psychological factors](#) in medical symptoms, believes that orthopedists tend to follow a mechanical model.

"There is a broken part that we are going to replace or fix, but how the patient reacts is not so mechanical," he said. "It is not part of the biomechanical model. An important component of recovery is emotional health."

In certain instances, such as significant social problems, it is appropriate for surgeons to refer to social workers or psychiatrists.

"It's just good medical care to pay attention to the patient as a whole and not just to the disease," Barsky said, who cited anxiety and depression about an illness as major emotional health issues. A physician should also be sensitive to such concerns prior to the procedure and ask how patients are adjusting after surgery.

"Patients in whom physical function does not improve to the extent that they expected may not be able to return to their occupation, so there's a great financial price to be paid right now. Patient satisfaction after surgery is also greatly impacted" Ayers said. "There will also be a challenge to define the practical, financial and operational models needed to deliver the care. A lot of health care reform is focused on improving the value that we are offering our patients."

In the long term, he noted that services and interventions for emotional health "may be less costly than having a patient who continues to be dissatisfied and seeking additional medical care because of lower functional improvement." – *by Bob Kronemyer*

-
- David C. Ayers, MD, can be reached at University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655; 508-334-9750; email: ayersd@umhc.org.
 - Arthur J. Barsky, MD, can be reached at Brigham and Women's Hospital, 75 Francis St., Boston, MA 02115; 617-732-5236; email: abarsky@partners.org.
 - Patricia D. Franklin, MD, MPH, can be reached at University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655; 508-856-5748; email: patricia.franklin@umassmed.edu.
 - David C. Ring, MD, PhD, can be reached at Massachusetts General Hospital, Yawkey 2100, 55 Fruit St., Boston, MA 02114; 617-643-7527; email: d.ring@partners.org.
 - **Disclosures:** Ayers receives research funding for investigator-initiated studies from the NIH. Barsky has no relevant financial disclosures. Franklin receives research funding for investigator-initiated studies from the NIH, Agency for Healthcare Research and Quality and Zimmer, Inc. Ring has no relevant financial disclosures.

POINT / COUNTER

How much of an impact does a patient's preoperative emotional health play in your decision to perform a procedure or the type of postoperative rehabilitation you prescribe?

POINT

Emotional health dictates surgery

If I feel that if the patient is emotionally unable to follow through with rehabilitation, then I will not do the surgery. I think the rehabilitation in orthopedic surgery and knee surgery, which is what I specialize in, is extremely important. If the patient does not follow through properly, then he is subject to stiffness after the surgery and can develop swelling that will not subside. These things can become permanent disabilities for patients if they don't have good emotional responses to the surgery and, in turn, have the desired emotional responses that will lead to a favorable rehabilitation period.

I think it is extremely important that the patient go into the surgery with a positive attitude. If the patient becomes



J. Richard

emotionally depressed during the rehabilitation period, this may lead to a possible negative outcome. Therefore, I try to screen out people who are emotionally depressed. I encourage these patients to seek help for their depression before performing the surgery.

The interview with the patient is important, not only to identify the problem and the problem that might require surgery, but also to identify the possibilities of the patient following through with rehabilitation and giving adequate time to the rehabilitation after surgery. Because I perform on the knee only, I am quite interested about the patient's willingness and ability to do rehabilitation after the surgery. A patient's emotional health does influence his ability to undertake proper rehabilitation.

In order for a patient to have a successful surgery, he needs a successful rehabilitation. If the patient is not emotionally able to cope with the postoperative period and the requirements for rehabilitation after the operative period, then it is unlikely that the patient will have a successful outcome.

J. Richard Steadman, MD, is a partner at the Steadman Hawkins Research Foundation in Vail, Colo.

COUNTER

The patient makes the final decision

Preoperatively, I discuss with patients my awareness of their emotional health. But in an emergency situation, you need to proceed forward, regardless. However, certain procedures can be delayed, if it is agreeable to the patient. My theory is that the patient makes the final decision, although I provide input and advice.

The patients who have preoperative good emotional health have best outcomes. The key for the surgeon is to be aware of how this affects the patient. A simple question to ask the patient is, 'How do you think you're going to do after surgery?' And just listen to that patient's response. This can give an idea of the patient's job satisfaction. For example, the patient may respond that he plans on returning to work in 2 weeks with his arm in a sling. Or that patient may say he does not like his boss and that his job is terrible, so he doesn't think he can return to work for a full 6 months.



James C. Esch

You also get an indication if the patient is worried about after-care at home. Who is going to take care of me after surgery? Conversely, perhaps the patient has plenty of help at home or exudes a sense that he is fairly independent. Patients may also be worried about their finances. The key point is for the surgeon to be aware of the patient's particular circumstances.

You may be able to detect depression — whether the patient is just bummed out or has a lot of anxiety. These patients may seek emotional health through their family physician, a psychologist or a psychiatrist.

A patient may also stand out as having an emotional problem because that patient does not treat my staff well. The patient may be rude, for instance. This is a red flag for me.

Postoperatively, the patient may be able to do simple exercises on his own for the first 6 weeks, during which time you can evaluate that patient's awareness and eagerness to do those exercises under your control. Does the patient have good body awareness? Is the patient aware of balance? Does the patient have the emotional makeup to do exercise on his own? I assess the patient's ability to follow instruction.

Most patients who seem to take care of themselves physically, in my opinion, have better emotional health. By having a patient improve himself physically before undergoing a procedure, his emotional health might improve as well. For example, a patient with chronic depression coupled with smoking can be asked to not smoke 1 month before surgery and increase his walking distance.

Finally, there is an emotional contact that the patient makes with the surgeon. If the patient likes his surgeon and trusts his surgeon, then that patient has a chance for a better result.

James C. Esch, MD, is a member of the Orthopedics Today Editorial Board and practices at the Orthopaedic Surgeons of North County in Oceanside, Calif.

