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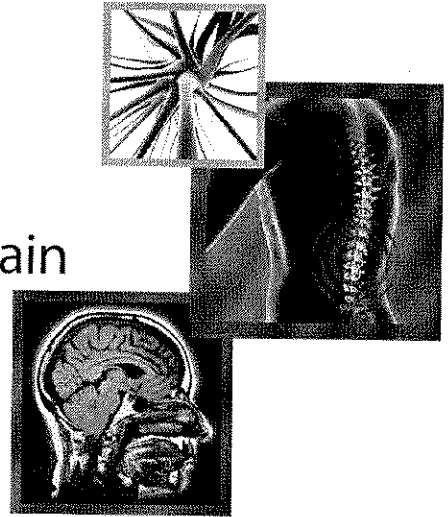
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MANAGEMENT PERSPECTIVE

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Reflecting on pain management for patients with osteoarthritis and other rheumatic disorders: there's more to pain management than managing pain

Danielle Perret^{1,2}, Eric Y Chang^{1,2,3}, Winnie Pang⁴, Shuntaro Shinada⁴ & Richard S Panush^{*4}



Practice Points

- There are promising advances in the understanding of the etiopathogenesis of osteoarthritis and in developing better interventions for palliation of symptoms, to retard or reverse disease, and to alleviate its pain. The pace of discovery will accelerate.
- Many patients will respond satisfactorily to conservative therapies. However, notable uncertainties remain as we struggle to care for those living with this common, chronic malady. These circumstances challenge us to reconcile our learning with our art.
- In a world of growing complexity and sophistication we must not overlook the person who is our patient, simple and basic as this seems. We must not be so focused on our electronic and informational advances or entranced by our machinery and technology that we forget the unique individuality and needs of each patient.
- Osler taught that “the practice of medicine is an art, based on science”. This doesn't change.

SUMMARY Medical progress is measured by advances in science and technology. The pace of discovery will surely accelerate. We are increasingly challenged not only to assimilate new information, but also to reconcile our learning with our art. We present the common clinical problem of managing pain in osteoarthritis as a paradigm for this dilemma in contemporary patient care. We do not yet have the understanding and interventions to do this optimally for all with osteoarthritis, leaving us with uncertainties as we struggle to care for these patients. In a world of growing complexity and sophistication we must not overlook the person who is our patient. It is easy to be seduced by electronic and informational advances, to be entranced by machinery, and to forget the unique individuality and needs of each patient. Osler taught that “the practice of medicine is an art, based on science”. This doesn't change.

“The essence of medicine is the reduction of uncertainty.” Perhaps you thought this would be an erudite, state-of-the-art exposition of advances and insights into understanding and managing pain in patients with rheumatic disease, replete with helpful new technologic, biologic and pharmacologic therapeutic interventions. It isn't. These are available [PERRET D ET AL. MANAGING PAIN

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IN PATIENTS WITH OSTEOARTHRITIS (2013), MANUSCRIPT IN PREPARATION] [1–22]. Rather this is a plea that, in this age of increasing medical/scientific sophistication we not forget that sometimes the most important treatment is administered by ear, words of comfort, offered by a doctor truly caring for his/her patient [23]. By recognizing that “nothing will sustain you more potently than the power to recognize in your ... routine ... the true poetry of life – the poetry of the commonplace, of the ordinary man, of the plain, toil-worn woman, with their loves and joys, their sorrows and their griefs” [24]. By appreciating that humanistic, artful practice is a precondition for an optimal pain management program. By remembering that in clinical medicine “science does not often substitute for art nor sophisticated technology for diagnostic acumen” [25]. To illustrate this perspective, we (rheumatologists and specialists in pain medicine) present a conversation we might have had with a recent patient (from the perspective of our experiences in the managed-care, private-practice system, widely encountered in the USA).

“Hello, doctor. I’ve been waiting a long time to see you and I hope you can help me. My knees hurt. So do my feet. And sometimes my fingers and my back. I used to walk regularly. I played golf daily. I was active. Now it’s hard to do anything. I don’t like that I’ve gained weight and am no longer fit. It’s difficult to write, cut meat, cook for my husband and family, and even tie my shoes. The back pain can be excruciating, and is debilitating when it radiates. I don’t know whether to put wedges in my shoes or not, and am confused about wearing orthotics with stability shoes or the trendy minimal, mid-foot shoes [18]. My stomach won’t tolerate NSAIDs and unfortunately I have a rather rare allergy to acetaminophen. I hate taking medicines generally. All told, life isn’t so pleasant anymore. It wasn’t supposed to be this way. My symptoms can vary greatly from day to day. I’m very worried and uncertain about what to expect. This is extremely disconcerting and hard to accept even though I understand it. I cannot help wondering “why me?”, “what will happen?” and “is there not something I can do to control events and outcomes?” “Will changes in my normal behavior alter the progressive nature of osteoarthritis?”

So, can you take care of me? Be my doctor? Manage this arthritis and my pain? Let me tell you what I expect from you. Let’s start with some basics and essentials of care in general. I want my care to conform to the attributes of quality articulated by the Institute of Medicine (the

prestigious, authoritative, health-advisory arm of the US National Academy of Sciences). Patient-centered, safe, timely, effective and efficient [26–28]. To which I would add humanistic. Greet me warmly. Smile. Act like you’re glad to see me. And that certainly applies to your staff too. Listen to me. Don’t interrupt after the apocryphal 14–17 s. Let me tell my story; it only takes a couple of minutes [29]. Surely you have that much time. Look at me while I speak. Don’t write, don’t type, don’t read, and please don’t focus on the computer screen. I expect you to be dressed professionally. Data document the value of this [30]. No sandals, no jeans. I like white coats and ties, or the equivalent for women. Please don’t address me by my first name (even in casual southern California); that presumes an intimacy that is my prerogative to invite. Please, doctor, I ask that you put down your pen and pay attention. Examine me, completely, carefully, and thoroughly gown me. No examinations through my clothes. Touch me. Make physical contact at each visit. I know the difference between a good and a cursory, superficial evaluation. Don’t ever overlook the incredible power of tradition, rituals and symbols in medicine. We physicians take this for granted too often. Taking an informed, complete, attentive, thoughtful, unhurried history and performing a meticulously thorough physical exam inspire and reassure, sometimes far more than verbal communication or prescriptions [27,31]. Furthermore, with all due respect, I don’t want you to be my friend but rather my physician; please don’t share your intimacies or experiences with me [32].

How will you prevent delays? I am a physician too, you know, and busy, like you are. Do you have an open access model practice [33]? Do you practice with partners or associates? How will I reach you? Trust me, I respect the need for you to sometimes insulate yourself from calls and inquiries, and I will try not to be a bother. However, I am distressed by my illness. I expect to have concerns and will want access to you when I feel it necessary. How will my calls be received? Will you accept emails? How quickly may I expect you to respond? I have a close family and they are they involved in my life and present illness. Will you speak with them when it is appropriate? How will you communicate with my other physicians? Who will be my ‘team leader’ [34]?

Now let’s talk about my illness. How will you approach this? How will you go about making a diagnosis? Although I am a physician, in this

circumstance I am your patient. I need to trust you to provide me with informed, expert, thorough, thoughtful care. What is your differential diagnosis? How will you determine whether I indeed have osteoarthritis? That my symptoms are not subtle polymyalgia rheumatic, or from hypothyroidism, or hemochromatosis, or calcium pyrophosphate deposition disease or Lyme disease? Or even fibromyalgia? I'm pretty certain they are not rheumatoid arthritis, lupus, vasculitis or another systemic rheumatic disease. How will my evaluation proceed? Remember, I want my care to be efficient. Minimize waste [28,35]. I do not want unnecessary testing just because I am a doctor. I certainly do not want unneeded exposure to radiation.

I am neither a rheumatologist, internist or pain doctor. I do not presume to know more about osteoarthritis, its management, or pain management than you. I look to you for expertise. But I have read some about this and found something I liked. It presented a sound, simple, principle- and evidence-based, multimodal, multidisciplinary, holistic approach [1]. I hope you too practice this way. In fact I respectfully brought these references and summary Box 1 & Table 1 for your consideration.

Be sure to confirm my diagnosis. Please don't forget that other maladies may mimic or coexist with osteoarthritis, like gout, calcium pyrophosphate dehydrate deposition disease, inflammatory arthritis, tendonitis/bursitis, polymyalgia rheumatic, fibromyalgia syndrome, endocrinologic disease (thyroid or parathyroid), depression, vascular disease and neurological disorders. I'm not depressed, but if my symptoms continue unabated this might be a problem. If there's any doubt I expect more expert consultation.

Please try hard to find a preventable or reversible underlying or primary disease whose identification might lessen my pain.

Use reasonable clinical judgment. I know that an experienced clinician can recognize osteoarthritis without obtaining extensive diagnostic studies. Often plain radiographs are sufficient to identify anatomical abnormalities, and even these are usually unwarranted for uncomplicated illness. More laboratory or serological testing is usually not necessary either [35].

Identify the site or sites of my arthritis. Do you think my disease is 'generalized', 'localized' to specific joints or 'mixed'?

Educate me about my illness. Don't make assumptions about my knowledge. Discuss the

Box 1. Principles of managing osteoarthritis.

- Confirm the diagnosis
- Seek preventable or reversible underlying or primary disease
- Identify the site or sites of osteoarthritis
- Use reasonable clinical judgment in assessing patients
- Begin therapy with education, explanation, discussion of prognosis and nonpharmacological modalities. Counsel patients to develop reasonable expectations for therapeutic outcomes
- Pharmacological therapy, if needed, begins with topical therapies, corticosteroid injections and, perhaps, viscosupplementation. Acetaminophen or NSAIDs may be helpful
- Manage monoarticular or oligoarticular disease with physical, topical and local therapies whenever possible, avoiding unnecessary systemic medications
- Other approaches are not yet evidence-based and remain experimental
- Do not recommend routine use of narcotic analgesics for managing patients with osteoarthritis. They should be used only for selected patients and by physicians who are experienced in caring for patients who are receiving narcotics
- Some surgical procedures for the appropriate joints of selected patients can lead to dramatic benefit

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disease, prognosis, expectations and therapeutic options with me extensively. I want to be a well-informed partner with you in managing my condition.

I want my therapy to begin with non-pharmacological modalities. I need to lose weight. Help me. Pay careful attention to my shoe wear, gait and ambulation; I know this too may lead to symptomatic improvement. Teach me about the proper use of walking aids to reduce my hip and knee pain. Give me formal occupational and physical therapy programs to help with activities of daily living, activity modification, quadricep strengthening exercises and, perhaps, patellar taping.

If my pain is still not well controlled, then add pharmacological therapy. I can't take acetaminophen at any dose. Nor do I want to take traditional NSAIDs. This complicates my care. For me, or others with a history of ulcers, bleeding diathesis, or anticoagulation use, consider COX inhibitors, or substituted salicylates. I want to try topical therapies to minimize the risk of systemic side effects; tell me about capsaicin cream, lidocaine or diclofenac patches, and other ointments. If my pain persists, maybe try intra-articular corticosteroids; I'm underwhelmed with what I've read about hyaluronan injections [19], and have been unimpressed with data about prolotherapy. It looks to me like there is limited evidence that treatments beyond the basics provide documented, consistent, further therapeutic benefit [1,21]. Please also consider cognitive behavioral

Table 1. Approaches to managing osteoarthritis.

Modality/site	Generalized	Hands/wrists	Shoulders	Hips	Knees	Feet
General						
Education	+	+	+	+	+	+
Explanation	+	+	+	+	+	+
Physical therapy	+	+	+	+	+	+
Occupational therapy	+	+	+	+/-	+/-	+/-
Orthoses	+/-	-	-	-	-	+
Bracing	+/-	-	-	-	+/-	-
Massage	+/-	-	-	-	+/-	-
Activity modification	+	+	+	+	+	+
Topical						
Topical NSAIDs	+	+	+/-	-	+	+
Topical anesthetic	+	+	+/-	-	+	+
Local						
Corticosteroid injection	+/-	+/-	+/-	+/-	+/-	+/-
Viscosupplementation	+	+/-	+	+/-	+	-
Systemic						
Acetaminophen	+	+/-	+/-	+	+/-	+/-
NSAIDs	+/-	+/-	+/-	+/-	+/-	+/-
Tramadol	+/-	+/-	+/-	+/-	+/-	+/-
Glucosamine	-	-	-	-	+/-	-
Chondroitin	-	-	-	-	+/-	-
Corticosteroids	-	-	-	-	-	-
Other						
Acupuncture	-	-	-	-	+/-	-
Narcotics	-	-	-	-	-	-
Surgery	-	+	+	+	+	+

-: Not recommended; +/-: Marginal, possible, occasional value; +: Recommended as indicated symptomatically.
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therapy, formal counseling or patient support groups to enhance my coping skills.

While I understand that there can be a role for the use of narcotic analgetics in osteoarthritis pain, please do not recommend routine or long-term use of these for me unless I am absolutely refractory to other pharmacological treatments and we discuss and consider the implications of this at length [20]. I am saddened that what is available is at best only palliative and that I have seen no 'disease-modifying' agents for osteoarthritis yet in my many years in medicine [1,20,21]. I hope it won't be long before you have something that can halt disease progression, reverse established disease, and even prevent disease from occurring [22].

I'm only interested in surgical procedures if I fail conservative therapies. I appreciate the potentially dramatic value of these for some patients with end-stage disease. What do you think of the mechanical intervention of joint distraction [36]?

Finally, let's discuss some other specific issues. Will my care be polymodal and multidisciplinary? Holistic? I hope so. Will I have access to a clinical psychologist or therapist skilled in pain and stress management? How do you view complementary and alternative medicine? I know that some, maybe many, are attracted to this but I think there's little really useful there for my situation and am not particularly interested in exploring this [37,38]. Keep the leeches [13] and botulinum toxin [14]. Will you exhaust nonpharmacologic approaches before prescribing medications? What may I expect in terms of pain relief? What will you plan to use? For how long? Will I ever not need pain meds? I do not want pain. Function? I want to function reasonably, fully resume my activities of daily living and live a life of quality. How about my sleep? It's now miserable. How can we address this? What is your attitude about new surgical approaches, often without long-term validation data? I don't want these, however desperate I may be, and hope your judgment is critical here. And what about novel, 'trendy' stuff, also not yet evidence-based, like platelet-rich plasma? Wait with this. I know there's exciting work being done on pain – mechanisms, physiology and interventions [PERRET D ET AL. MANAGING PAIN IN PATIENTS WITH OSTEOARTHRITIS (2013), MANUSCRIPT IN PREPARATION] [1–22]. Do you see future possibilities here? Should I consider agents that might moderate central pain control [6]? Do you think that cellular mechanisms of repair or regeneration will prove clinically useful [4,8–10,15]? When will we have some real disease-modifying drugs or biologics for osteoarthritis [21,22]?

I'm pretty sure I have osteoarthritis. I know that pain from osteoarthritis can be debilitating and depressing. But I also know that good clinicians have much to offer to restore patients' lives. I know too that a multidisciplinary, multimodal, holistic, evidence- and principle-based approach, customized for me, in context [39], will provide my best opportunity for a good outcome. And please don't forget to care for me, not my disease.

This conversation is difficult for me. It asks a lot. And necessarily is quite self-centered. But I am the patient, and this is the care I seek. Will you be my doctor?"

I reflected on the question for a long time, staring at the patient and then out of the window, before answering. Finally I replied, "You know I can't be your doctor, mom. But I know someone who can."

Future perspective

A recent editorial in the *New England Journal of Medicine* attempted to 'glimpse' the next 100 years in medicine [40]. The predictions were predictable, and replete with the anticipated technological and scientific advances.

We implore that in this world we not forget the person who is our patient. It is easy to be seduced by our electronic and informational advances, to be entranced by our machinery, to forget the unique individuality and needs of each patient [41]. Verghese has written eloquently deploring the emerging culture where the computer and its contents become our focus and the patient is virtually virtual [23]. Indeed in the world of today and tomorrow we need more than ever to remember that "the practice of medicine is an art, based on science" [42]. This will not change.

We have used the example of managing pain in osteoarthritis as an emblematic paradigm for patient care, particularly for those caring for patients with chronic painful conditions. Osteoarthritis is arguably mankind's oldest documented illness. It remains common and will probably affect us all in some fashion should we live long enough. We don't yet understand its etiology or pathogenesis. We can't yet manage it beyond symptomatically. While that is adequate for many, others suffer with inadequately relieved painful symptoms and disability. We have touched on some of the exciting advances in our knowledge about these aspects of osteoarthritis, and provided references and certain summary material for the interested reader (but did not conceive this essay as the forum to review these in greater detail).

Medicine is humane science. As Verghese perceived, "as technology advances ... I see us bringing more ... to the bedside, and ... spending

more time with patients ... the more time with the patient, the better" [43]. Let us remember that "...there is no manual that deals with the real business of ... (medicine), the most important aspect of all. Caring about what you are doing..." [44]. Let us not neglect the imperative to "... see in every person a universe with its own secrets, with its own treasures, with its own sources of anguish, and with some measures of triumph" [45]. And data suggest that practicing medicine this way leads to demonstrably better doctors providing measurably better care [46-50].

"The secret of the care of the patient is in caring for the patient."

– Francis W Peabody [51].

"Take care of people, not illness ... the future of medicine belongs to those ... who ... in spite of bureaucratic systems, pressures and financial disincentives to spend time with patients continue to care for the patients as human beings."

– Eugene Anson Stead Jr [52].

Disclaimer

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