A sailor's pain

Veterans' musculoskeletal disorders, chronic pain, and disability

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A few years after leaving the navy, a 50-year-old Veteran presents to a new family physician with chronic knee and back pain. He is seeking a new physician for opioid and benzodiazepine refills, referrals for ongoing acupuncture and massage therapy, and completion of Veteran Affairs Canada (VAC) disability claim forms for his back. He was medically released at the rank of Petty Officer owing to knee impairment secondary to a fracture sustained aboard ship. He twice strained his back on deployments, but did not develop chronic low back pain until after leaving the Canadian Forces (CF). On release from the CF he completed comprehensive medical, psychosocial, and vocational rehabilitation in the VAC Rehabilitation Program for disability related to his knee impairment. Lately, chronic low back pain prevents him from continuing civilian employment and enjoying life.*

The physician takes the Veteran's history, performs appropriate physical examination and diagnostic investigations, and obtains previous medical records. The physician diagnoses chronic mechanical low back pain and knee osteoarthritis, and is concerned about the Veteran's mental health. When the family physician tries to explore the mental health differential diagnosis, the Veteran initially becomes upset, but he responds to motivational interviewing. The physician books follow-up appointments to develop a therapeutic relationship with the Veteran and completes the VAC forms. With consent, the physician also sends a referral letter to the VAC district office, outlining the Veteran's health issues. The client is found to be eligible to re-enter the VAC Rehabilitation Program to manage disability related to his back pain. The Veteran is ultimately able to withdraw from chronic opiate and benzodiazepine medications and optimize his participation in life.

Family physicians play key roles in the management of Veterans with disabilities. One in 10 Canadians report activity limitation related to pain or discomfort.[1] Musculoskeletal disorders (MSDs) are a leading cause of medical discharge from military service.[2] Canadian military and Royal Canadian Mounted Police Veterans of all ages receive disability benefits as a result of MSDs, and MSDs account for a substantial proportion of VAC's $3 billion budget. Veterans with entitlements for service-related MSDs often have comorbid chronic pain and mental health conditions, which complicates care. This paper reviews a family medicine approach to the management of Veteran's disabilities stemming from MSD-related chronic pain.

Disability

Disability is used loosely in family medicine literature. Effectively helping a person with disability toward normalized function at home and work requires shifting from a disease paradigm to a disability and residual-ability paradigm. A person's physical or mental health problem results in *impairment* in biologic function. Not all persons with impairments are disabled. *Disability* is the effect of impairments on daily functioning within a social and environmental context.[3-6] Musculoskeletal disorders are not in themselves disabilities, but a person with an MSD is disabled when the condition has functional effects as a result of the impairment and psychological, social, or environmental barriers.[7,8]

Viewing disability this way and considering that health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"[9] leads to 3 key elements in the management of disabilities:

- Optimize treatment of the physical or mental impairment.
- Assist with mental adaptation and coping with the disability.
- Reduce external social and physical environmental barriers.

Managing disability related to chronic pain

Box 1[10,11] suggests an approach to the management of disability related to chronic pain. Thorough assessment is fundamental. Both intensity of pain experience and participation status define disability in chronic pain.[8] There is strong evidence that early, comprehensive rehabilitation for low back pain and other MSDs is preferred.[10] The family physician works with a team where necessary to provide reassurance, cognitive behavioural therapy, psychoeducation, barrier reduction, and activity resumption.[12] It is important to resolve contradictions

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*The case presented is fictitious.

Box 1. Approach to management of disability related to MSDs with chronic pain

These elements can be concurrent:

- Conduct a comprehensive disability assessment using standardized approaches to
  - establish diagnoses of contributing conditions;
  - characterize effects of impairment on functional ability;
  - assess the individual's mental coping and adaptation;
  - identify residual abilities and strengths; and
  - identify social and environmental barriers, considering family life, community participation, recreation, and employment.
- Establish comprehensive disability treatment goals and monitor progress.
- Initiate rehabilitation to optimize treatment of the MSD and pain, improve function and independence, and reduce social and physical environmental barriers.
- Optimize pain control using psychological therapy and medication, judicious use of nonopioid analgesics, and, only when clearly indicated, considering a cautious trial of opioids (**Box 2**).
- Give early attention to mental health issues:
  - Assist with coping and adaptation to ongoing pain.
  - Detect and treat comorbid mental health conditions.
- Consider collaborating with a rehabilitation team and sharing case management.
- Refer to specialized rehabilitation professionals when there is more complex, severe, refractory, or established disability.

MSD—musculoskeletal disorder.
Data from Waddell et al[10] and Taiwo and Cantley.[11]

stemming from competing interests of multiple actors (employer, insurer, health care provider, and family members). The effectiveness of this approach has been shown in several studies and reviews.[2,10,13]

Interdisciplinary collaboration. Family physicians are unlikely to accomplish all of this alone, so collaboration with specialized rehabilitation providers is advised, particularly in the case of complex or well-established disabilities.[2,14] Although family physicians provide case management, they share that role with specialized disability case managers. Family physicians can promote development of local disability management teams. Participation in such teams can be satisfying work for family physicians.

Mental health comorbidity. Mental health conditions, especially depression, often are comorbid with MSDs and chronic pain–related disability.[15,16] Detection and treatment might improve outcomes.[17] Research into optimum approaches continues; however, both medication and psychological therapies have roles to play. Psychological treatments might diminish or control negative mood, disability, and in some cases chronic pain.[12,18] A nonconfrontational explanation of the multifaceted nature of MSD pain often negates the thought that "The doctor thinks it's all in my head." Explaining that combined physical and psychological treatment is more likely to help these difficult problems makes the patient more receptive.

Military context. The military context of Veterans with service-related disabilities is important. Young, healthy soldiers in the prime of fitness who become disabled after illness or injury can experience a powerful sense of loss of identity and health, leading to feeling "broken" (common military slang). When they transition to civilian life, Veterans can no longer access military health services, fending for themselves in the civilian health care system. Loss of military identity includes loss of military "family" and disorientation in the unfamiliar civilian culture. Many report difficulty finding a family physician, particularly when they move their families to new communities. Veterans might have strong beliefs that military service is the root of disorders arising later in life. These context issues can present social and physical environmental barriers that define Veterans' disabilities when they have chronic health problems.

Management of chronic non-malignant pain. Management of chronic pain requires a comprehensive treatment plan fully addressing disability. Nonpharmacologic approaches are essential, variably including collaborative physical therapies, education, mental health care, and social support[2,12] (**Box 1**[10,11]). The patient needs to know that analgesics and adjunctive medication are used to control pain to facilitate other interventions that reduce disability so that he or she can resume normal activities and that pain might never be completely eliminated.

Box 2[19,20] suggests an approach if chronic opioid therapy (COT) is considered. Chronic opioid therapy in non-malignant pain can promote disability and be complicated by side effects, tolerance, addiction, and illicit behaviour including diversion.[21] The evidence for a treatment benefit of opioids in disability related to chronic pain is unclear.[22] Long-acting opioids might not protect against misuse.[21] Although it is important to try to screen patients before offering COT, there is no generally accepted screening tool.[23] The fear-avoidance model of chronic pain might explain why some people get into a spiral of increasing avoidance and persistent dysfunction[24] on COT. Guidelines recommend documenting informed, signed consent for COT.[19] When COT fails to help restore ability, consider substitution or withdrawal.

Department of National Defence

Ill and injured CF members receive rehabilitation to restore members to operational readiness and, whenever possible, to minimize development of disabilities. The CF Rehabilitation Program is affiliated with designated civilian centres of rehabilitation excellence.

Casualty Management Teams assist in coordinating regional multidisciplinary rehabilitation. The Department of National Defence and VAC work together to integrate services for members who transition to civilian life with service-related disabilities.

Box 2. Approach to COT in chronic non-malignant pain

- Exhaust nonmedication and nonopioid alternatives (**Box 1**).
- Clarify rationale for considering COT in meeting disability treatment goals.
- Estimate benefit and risk of a trial of COT based on history, physical examination, and drug testing, using a screening tool and recognizing that risk screening is not robust:
  - Benefit (lower likelihood of response): Poorly defined pain conditions, likely somatoform disorder, unresolved compensation or legal issues; conditions more likely to have strong psychosocial contributors (some types of chronic low back pain, daily headache, fibromyalgia).
  - Risk (higher likelihood of promoting misuse or disability): Personal or family history of alcohol or drug abuse; younger age; presence of psychiatric conditions.
- Refer to a pain management specialist team if there is
  - a greater risk of noncompliance, addiction, misuse, or disability; or
  - a mental health comorbidity, social problems, or environmental barriers.
- If benefits and risks appear favourable for COT ...
  - Collaboratively establish treatment goals with the patient, and plan a limited trial.
  - Obtain signed, informed consent for COT.
  - Start with a low dose if the patient is opiate-naïve and increase slowly, monitoring for side effects.
  - Monitor the patient periodically for pain control; level of social, mental, and physical functioning; excessive and escalating use; compliance with the treatment plan; and goal achievement. Consider drug testing.

COT—chronic opioid therapy.
Data from Chou et al[19] and the College of Physicians and Surgeons of Alberta.[20]

Resources

Resources for physicians

- World Health Organization *International Classification of Functioning, Disability and Health* checklist: **www.who.int/classifications/icf/training/icfchecklist.pdf**
- Veterans Affairs Canada (VAC) telephone: 866 522-2122 (English) or 866 522-2022 (French)
- VAC website: **www.vac-acc.gc.ca**; click on "Providers and Professionals"

Resources for Veterans

- VAC telephone: 866 522-2122 (English) or 866 522-2022 (French)
- VAC website: **www.vac.gc.ca**; click on "Services and Benefits"

BOTTOM LINE

- Managing disability requires optimizing treatment of the impairment, assisting mental adaptation, and reducing external social and physical environmental barriers.
- The goal in managing disability is to assist patients in achieving optimal quality of life by restoring health, independence, and participation in life.
- Family physicians have key roles in collaborative disability case management with Veterans Affairs Canada.

POINTS SAILLANTS

- La prise en charge d'une invalidité nécessite l'optimisation du traitement de la déficience, le soutien à l'adaptation mentale et la réduction des barrières environnementales sociales et physiques externes.
- La prise en charge d'une invalidité a pour but d'aider le patient à atteindre une qualité de vie optimale en rétablissant sa santé, son indépendance et sa participation à la vie.
- Les médecins de famille jouent des rôles clés dans la gestion concertée des cas par Anciens Combattants Canada.

Veterans Affairs Canada

Eligible Veterans with service-related MSDs resulting in disabilities affecting reestablishment in civilian life can access services through VAC, including personalized case management, financial benefits, assistance with career transition, and comprehensive rehabilitation services like expedited referral to psychologists, occupational therapists, social workers, vocational rehabilitation professionals, and pain management programs.[25] For clients with substance use problems, specialized assessment and treatment services are available. Area counselors in VAC district offices provide case management and welcome family physician collaboration.

Adverse drug utilization. Some patients misuse opioid therapy. Like other paying agencies, VAC is obliged to use prescription screening procedures to identify clients with adverse medication use profiles. When claims fall outside accepted parameters, those cases are referred to the Adverse Drug Utilization Evaluation committee for resolution by a team (including the client, the client's physician, and VAC regional and district staff) in a manner beneficial to the client.

Family physicians and VAC. Veterans Affairs Canada welcomes family physician collaboration and relies on family physicians to provide necessary documentation to assist in providing services to Veterans. Family physicians can encourage Veterans to contact VAC and can send referral letters to the local VAC district office.

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Competing interests
None declared

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