Letters to the Editor

Case Report: Chest-Wall Lump Yields a Surprising Diagnosis

To the Editor: A 17-year-old patient presented with a solitary lump over the right chest wall of three years' duration. The patient reported that the lump was causing discomfort during contact sports and had an unattractive appearance. Clinical examination revealed a nontender, firm, and side-to-side mobile subcutaneous lump obliquely overlying the right anterolateral chest wall *(Figure 1)*. Ultrasonography revealed a nonspecific solid heterogeneous mass measuring 76 mm × 26 mm × 18 mm. A punch biopsy result was inconclusive. Chest radiography and computed tomography were not considered practical imaging tools for this patient, and magnetic resonance imaging was not readily accessible. The patient was scheduled for an incisional biopsy under local anesthesia, with the option of excising the whole lump to avoid multiple procedures.

During the procedure, the mass was found to be protruding through the intercostal muscles and partially attached to the fascia. However, the distal part of the mass could be lifted, allowing the mass to be removed entirely following ligation of its proximal attachment to prevent arterial bleeding from the neurovascular bundle. The tumor was boat- or banana-shaped with a smooth, light-yellow surface *(Figure 2)*. Closure of the surgical incision was uncomplicated *(Figure 3)*. A histopathology analysis revealed a schwannoma. The patient had no postsurgical sequelae or recurrences during one year of follow-up.

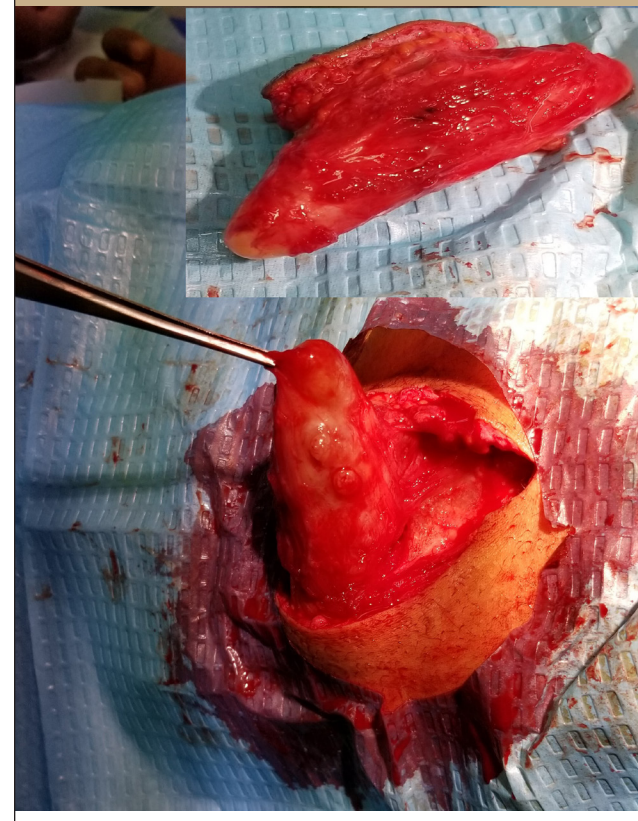
Schwannomas (i.e., neuromas) are sporadically encountered benign tumors that originate from the sheath of peripheral nerves. They can manifest as lumps in the skin and body cavity.[1] Schwannomas commonly occur between 40 and 60 years of age.[2,3] This patient, who first noticed the tumor at 14 years of age, might be the youngest reported case.

Ultrasonography is a useful tool for evaluating the size, attachment, and vascularity of soft tissue lumps and confirming the more common diagnoses of lipoma or cyst. However, a punch biopsy is not a practical approach for the diagnosis of subcutaneous lumps. If magnetic resonance imaging is unavailable, core, incisional, or full excisional

FIGURE 1

Subcutaneous lump obliquely overlying the right anterolateral chest wall.

FIGURE 2



Dissection revealed a boat- or banana-shaped tumor with a smooth, light-yellow surface.

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This series is coordinated by Kenny Lin, MD, MPH, deputy editor.

FIGURE 3

Closure of the surgical incision of the chest wall.

biopsies may be performed for tissue diagnosis. Surgical excision is a definitive treatment if a patient wants a large schwannoma removed.

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The Role of Family Medicine in Reducing the Risk of Myopia

To the Editor: The myopia epidemic represents an insidious public health challenge. The prevalence of myopia has been increasing in many countries, especially in East Asia, where young adults in some communities have a prevalence of greater than 90%.[1-3] It has been estimated that myopia will increase globally from 1.4 billion people in 2000 to 4.8 billion people by 2050.[4] Several environmental and behavioral factors are known to increase the risk of myopia. Importantly, children who spend less time outdoors have a higher risk, which is why extensive public health efforts have been made to encourage more outdoor time.[5] Although optical correction can address the refractive aspects, the underlying anatomic changes that cause it (principally, increased axial length) heighten the risk of uncorrectable visual impairment from associated optic nerve and retinal damage. Additionally, individuals with myopia incur costs related to optical correction and can have a reduced quality of life.

The American Academy of Ophthalmology's Task Force on Myopia, which included representatives from the American Academy of Family Physicians and the American Academy of Pediatrics, recently outlined the need for a comprehensive public health strategy for myopia that relies on contributions from family physicians.[6] Visual acuity testing is critical to detect early forms of eye disease and should be a routine part of well-child examinations. Pharmacologic interventions (e.g., low-dose atropine eye drops) and certain specialized contact lenses have been shown to reduce the progression of myopia. Family physicians and pediatricians can educate children and their families about this condition and strategies for controlling it while also referring them to eye care professionals for additional management.[6] Encouraging outdoor time is important to reducing the risk of myopia and can play a role in more extensive discussions about healthy lifestyles. It is anticipated that continued virtual learning during the COVID-19 pandemic will reduce time outdoors for children and will therefore cause an increase in the risk of myopia. By educating children and their parents about myopia and the benefits of outdoor time, family physicians and pediatricians can play an important role in mitigating the public health burden of this condition.

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Prolotherapy: An Evidence-Based Adjunctive Therapy for Knee Osteoarthritis

Original Article: Chronic Musculoskeletal Pain: Nonpharmacologic, Noninvasive Treatments

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To the Editor: We appreciate the article on therapeutic options for chronic musculoskeletal pain by Dr. Flynn. We want to highlight prolotherapy, an injection-based modality for chronic pain with protocols targeting intra- and extra-articular pain-generating tissue. Prolotherapy is supported by a growing body of literature reporting effectiveness for several chronic pain conditions, particularly knee osteoarthritis.

Prolotherapy dates from at least 1937 (then called sclerotherapy because of the observation that early, more caustic solutions caused scarring).[1] Small volumes of a therapeutic solution, typically dextrose, are injected within the affected joint and at the bony attachments of tender tendons and ligaments around the joint. Injections are typically given monthly over three to six sessions. The mechanism of action is unclear; inflammatory and nerve-specific effects are hypothesized.[2]

A rigorous randomized clinical trial assessed the effectiveness of prolotherapy for knee osteoarthritis.[3] One year after treatment, participants receiving prolotherapy reported statistically significant and clinically important improvements on a validated questionnaire compared with participants in two different control groups (blinded injection and at-home exercise). These findings have been corroborated in other clinical trials.[4] Data from some have been subjected to systematic review and meta-analysis, with positive results.[5] Satisfaction with prolotherapy in these studies was high, and there were no adverse events.

The prolotherapy protocol is appropriate for outpatient family medicine but requires training not typically available in residency and fellowship programs. Two nonprofit professional organizations offer such training: the Hackett Hemwall Patterson Foundation (https://hhpfoundation.org/education/conferences/clinical-conference-october/) and the International Association for Regenerative Therapy (https://www.iart.org/About). These sibling organizations offer CME-eligible training through academic conference and service-learning activities in collaboration with the University of Wisconsin.[6]

Although more studies are needed to better understand prolotherapy's mechanism of action and clinical utility at the system level, existing literature supports considering prolotherapy in carefully selected patients with symptomatic knee osteoarthritis refractory to other care modalities.

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In Reply: Thank you for your letter in response to my review of nonpharmacologic, noninvasive therapies for chronic musculoskeletal pain. Prolotherapy was outside the scope of the article, which did not include the evaluation of injection therapies. I agree that in a small number of clinical trials of knee osteoarthritis involving small sample sizes, study participants who received prolotherapy experienced small treatment effects compared with control participants. However, it is noteworthy that due to the limited quality of these studies, the 2019 American College of Rheumatology osteoarthritis treatment guidelines conditionally recommended against the use of prolotherapy for knee or hip osteoarthritis.[1]

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