

"Wristy" Business

Howard A. Winston, MD, CCFP, FCFP, Dip. Sport Med. (CASM)

Paolo, 47, is a competitive squash player who comes to your office complaining of right wrist pain, present for the past year. He has played squash at a high level for 30 years, with no serious injury that would take him out of his sport for an extended period of time—only a few battle wounds. He is right-handed and has had his share of confrontations with his opponents and the walls. He states that the flexibility of his right wrist has diminished over the years and, at times, he has quite a bit of stiffness in the mornings.

You take a further history and perform a physical examination on Paolo. The most significant finding upon physical examination is his loss of range of motion by about 30% to 40%, both in flexion and extension. His grip strength is still quite good, but he has a little thumb extension weakness. He has complained that his ability to return shots has greatly diminished as he demonstrates the limitations of his wrist movement.

Upon examining his wrists, you think you notice a click that is not evident on the left side. He has no evidence of any neurologic findings and has minimal tenderness over his anatomical snuff box. You send him for some plain X-rays of his wrist and ask to see him in one week.

Paolo returns to review his X-ray report. He is told that the report indicated some early degenerative changes in his carpal joint and in the radiocarpal joint of his right wrist.

Upon further examination, you confirm that there is a mildly palpable click in his right wrist with rotational motions. At this point, you send him to an orthopaedic surgeon, who states that there is nothing surgically required for treatment of the wrist pain. Paolo is sent back to you and also for six weeks of physical therapy.



Paolo returns after his series of physical therapy sessions with worsening discomfort. You send him to a primary-care sports medicine physician who is concerned about a tear of the triangular fibrocartilage complex (TFCC) in his right wrist. The sports medicine physician decides to order a magnetic resonance imaging (MRI) arthrogram. The arthrogram (injecting the dye into his wrist joint) will give a better impression of any tear of the soft tissues of the wrist.

> Paolo returns six weeks later to review his MRI arthrogram with the sports medicine physician. The result confirms a tear of the TFCC and leads to more focused physical therapy, in addition to an assessment by an orthopaedic surgeon with expertise in wrist arthroscopy.

Paolo returns three months later to report that he is booked for arthroscopic surgery in two months. Clearly, Paolo has a structural problem in his right wrist that requires a structural solution, hence, arthroscopic

> Paolo returns a few weeks after his surgery, already noticing an improvement in his wrist's motion. Paolo's pathology is directly related to the wear and tear effect that squash has had on his right wrist over the years. He will require some post-operative physical therapy, with the intent of returning to squash at a much later date.

> When assessing the wrist, always try to think of what structures you are examining and what you need to do to test each structure. If there is a noticeable abnormality in the wrist, think of what will be the most appropriate test to help demonstrate the pathology. Once you know that, the proper treatment can be organized for your patient.

> The wrist has some pretty important structures in it. If the scales tip too far to the demand side of things and outweigh supply, then injury will occur. The best form of prevention is to keep the wrists strong, yet flexible, and to avoid any abusive motion or action that could possibly damage the soft tissue structures of the wrist. Playing a physical game like squash can be quite exhilarating, but it can also be considered "wristy" business.

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Dr. Winston is an Assistant Professor. Department of Family & Community Medicine, University of Toronto, and Medical Director, Centre for Health and Sports Medicine, North York, Ontario.