and further occluding the blood vessels. More recently, it has been suggested that hypothenar hammer syndrome occurs only in patients with pre-existing palmar artery fibrodysplasia, with over 90% of sufferers having abnormal angiographic features in the contralateral, asymptomatic hand. Blunt impact injuries to the radial artery are less common because the impact point of the palm is not normally over the radial artery. Nevertheless, vasospasm of the radial artery may occur secondary to ulnar artery injury.

Conservative management, including the avoidance of exacerbating factors, should be tried before interventional treatment. It is likely to be effective in establishing a good collateral circulation with favourable long-term symptomatic outcome. Cessation of the offending activity usually involves a change in work practice and the avoidance of blunt trauma to the hand. Patients should be encouraged to stop smoking to reduce vascular atherogenicity and to keep their hands warm. Antiplatelet therapy should also be considered.

Vasodilators, such as calcium channel blockers, and cervical sympathetic block may also be helpful. Although endoscopic sympathectomy may improve symptoms, it may not be beneficial if collateral vessels are already maximally vasodilated. A temporary stellate ganglion block, if successful, may help in predicting the likelihood of prolonged improvement with sympathectomy. Segmental ulnar artery excision with vein grafting is only indicated in patients with severe symptoms having poor collateral circulation, in whom conservative measures have failed. Amputation of necrotic fingertips may be necessary in advanced cases.

Arterial occlusive disease of the hand may not be clinically obvious owing to the rarity of atherosclerotic occlusions beyond the subclavian artery and the generally good collateral circulation in the upper limb. Acute awareness of post-traumatic occlusion of the ulnar artery is therefore needed when a patient who has a heavy manual job presents with pain, numbness and cold intolerance of the hand.

References


Correction

The article "Users' guides to the surgical literature: how to use an article about a diagnostic test" by Drs. Archibald, Bhandari and Thoma and the Evidence-Based Surgery Working Group, in the February 2001 issue of the Journal (pages 17-23) contains a number of errors as follows.

(1) On page 21, middle column the sentence that begins "Using this as the new pre-test ... using the LR of an uncertain FNAB of 5.7 (Table 3) is about 22%," should read "Using this as the new pre-test ... using the LR of an uncertain FNAB of 0.6 (Table 3) is about 3%." This result means that 1 of 33 patients who have thyroidectomy in this scenario will benefit by having their cancer treated.

(2) Page 21, Table 3, footnote "Likelihood ratio of cancer when FNAB is read as negative = 1.1 (3/38)/(89/126): 3% of these are cancer," should read "Likelihood ratio of cancer when FNAB is read as negative = 0.1 (3/38)/(89/126): 3% of these are cancer." 

(3) Page 22, left column, second paragraph, the sentence "Set your ruler at 20% on the right column and use the upper and lower reported LRs for the uncertain result for FNAB in the literature, noted as 7.6 and 1.1. Should read "Set your ruler at 20% on the right column and use the upper and lower reported LRs for the uncertain result for FNAB in the literature, noted as 0.6 and 3.2." This gives the lower and upper limits for the pre-test chance that the patient has cancer as 9% and 28%.

An executive summary of this paper containing the correct numbers can be obtained from the author: archibs@mcmaster.ca.