Management Is Supportive

Myositis *from page 1*

Additionally, inclusion body myositis has a tendency for distal and asymmetric muscle involvement, such as a foot drop.

In contrast, polymyositis more commonly encompasses proximal, symmetric muscle weakness.

Pharyngeal muscle weakness is a common characteristic of both inclusion body myositis and polymyositis.

In particular, however, the symptom of proximal dysphagia resulting from cricopharyngeal spasm is more often seen in cases of inclusion body myositis than in its mimic.

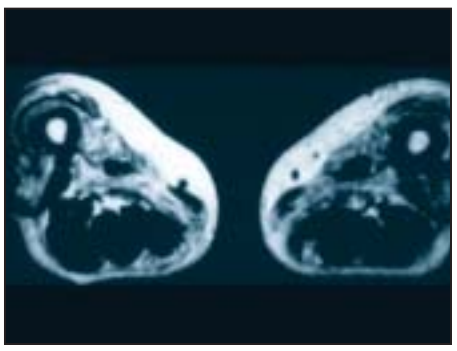
"Patients often complain of a blocking sensation when they swallow that just doesn't go away," said Dr. Oddis.

"This is a little different than pharyngeal myopathy seen in polymyositis because it is persistent; pharyngeal myopathy waxes and wanes with the severity of the involvement of the proximal musculature," he added.

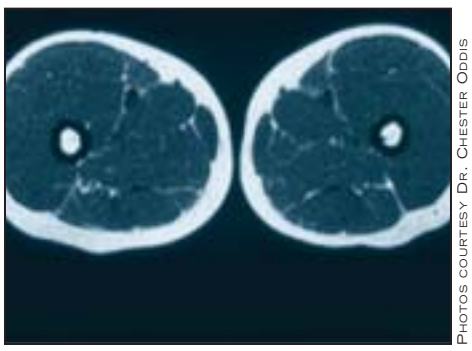
Additionally, unlike many of the other, more well-known connective tissue diseases, inclusion body myositis occurs predominantly in men.

"It sneaks up on them in middle age and follows a characteristic pattern of painless muscle atrophy, including the forearm flexors, quadriceps, and the intrinsic muscles of the hands," said Dr. Oddis.

Despite the fact that it is painless, Dr. Oddis offered a trick to assess atrophy.



Inclusion body myositis can cause marked atrophy of the quadriceps.



By comparison, the quadriceps of an unaffected individual are robust.

PHOTOS COURTESY DR. CHESTER ODDIS

"The forearm and quadriceps atrophy is usually obvious on examination. To assess hand muscle strength, I'll often ask patients to form a circle with their fingers," he said.

"Because of their intrinsic muscle weakness, the circle is often more like a teardrop. This teardrop sign is something you probably won't see in polymyositis."

'It sometimes takes two, three, or four biopsies before you can get [a result] you can hang your hat on, but when you do, there is no question.'

Dr. Oddis also pointed out that magnetic resonance can be especially useful in differentiating a particular case of inclusion body myositis from polymyositis.

"The results will be abnormal in both conditions, but MRIs from patients with inclusion body myositis are more likely to show fatty infiltration and atrophy and more widespread abnormalities, while in polymyositis, the predominant abnormality seen on MRI is inflammation distributed along the fascia," Dr. Oddis explained.

Currently, the only definitive test that exists for inclusion body myositis is a muscle biopsy.

However, because of the possibility of skip lesions, "it sometimes takes two, three, or four biopsies before you get something you can hang your hat on, but when you do, there is no question," said Dr. Oddis.

"The distinctive histology that you're looking for includes endomysial inflammation, the presence of rimmed vacuoles, and intracellular amyloid deposits or twisted tubulofilaments [containing hyperphosphorylated tau]," Dr. Oddis added.

Management options for inclusion body myositis are often limited to supportive efforts, for instance, myotomy to relieve dysphagia caused by cricopharyngeal achalasia, said Dr. Oddis.

So far, there are no definitive treatments that have been been proven effective in achieving sustained remission and improvement in a patient's whole body strength.

However, there are some reports that suggest there may be a subgroup of patients with this disease who experience at least a partial, albeit transient response to anti-inflammatory, immunosuppressant therapy.

For this reason, said Dr. Oddis, an initial 6- to 8-week trial of prednisolone and an immunosuppressive drug such as methotrexate or azathioprine is a reasonable option for newly diagnosed patients. ■

True Cerebral Vasculitis, Unlike Imposters, Gets Lifetime Tx

BY DIANA MAHONEY
New England Bureau

BOSTON — Reversible cerebral vasoconstriction syndromes resolve with simple, if any, treatment, whereas true cerebral vasculitis requires a lifetime of cytotoxic drug therapy. The clinical challenge is to distinguish the mimic from the real thing—and physicians frequently fall short of the mark, according to Leonard Calabrese, D.O.

A group of diverse conditions characterized by multifocal narrowing of the cerebral arteries, reversible cerebral vasoconstriction syndromes (RCVS) are the most common and most important clinical mimic of true cerebral vasculitis, particularly primary angiitis of the central nervous system (PACNS), Dr. Calabrese said at a meeting on rheumatology sponsored by Harvard Medical School.

Differentiating between the two conditions is of vital clinical importance because the respective management approaches differ substantially.

"While patients with true vasculitis of the central nervous system typically require long-term immunosuppressants and cytotoxic drugs, those with [RCVS] can often be treated with observation or calcium channel blockers alone," said Dr. Calabrese.

This is because RCVS is self-limited, usually resolving on its own within days to weeks, whereas PACNS is a chronic, irreversible inflammatory condition.

Although both conditions share certain features, such as angiographic evidence of vasoconstriction and arteritis, variations in the clinical context provide the requisite clues for making a definitive diagnosis, noted Dr. Calabrese, head of clinical immunology at the Cleveland Clinic.

Unlike PACNS, in which there is no gender predominance, RCVS typically occurs in women aged 20-50 years. The condition often presents idiopathically or in a variety of clinical settings, such as after head trauma or neurovascular surgery, during pregnancy or the puerperium period, or in response to certain medications or illicit drugs, said Dr. Calabrese. It may also occur in the setting of catecholamine-secreting tumors, he said.

While observation alone may be justified in some RCVS patients, those with recurrent thunderclap headache may benefit from verapamil or nimodipine.

"The hallmark of RCVS is the thunderclap headache: extraordinarily intense, acute headache pain that crescendos within 1 minute and has a pattern of recurring over 7-14 days," said Dr. Calabrese. "The headache may occur with or without neurological signs, and it may be spontaneous or precipitated by exercise, sex, coughing, bathing, or the Valsalva maneuver."

Although headache is also the most common symptom in individuals with PACNS, "it is generally not of the acute, severe variety. Rather, headache associated with PACNS tends to be insidious and progressive, and is more often described as a dull ache."

Because the apoplectic onset of headache in RCVS mimics subarachnoid hemorrhage, "the assumption should be that all of these patients have subarachnoid hemorrhage until proven otherwise," Dr. Calabrese stressed. Toward this end, neuroimaging and analysis of cerebrospinal fluid are critical.

"The results of cerebrospinal fluid analysis in [RCVS] are always normal or near-normal, with no evidence of aneurysmal subarachnoid hemorrhage," said Dr. Calabrese. In contrast, CSF examination uncovers abnormal results in more than 95% of patients with PACNS, he said, noting that the findings usually reflect aseptic meningitis, with modest pleocytosis and elevated protein levels.

Imaging studies of the brain parenchyma are normal in the majority of RCVS patients, "although MRI occasionally reveals evidence of infarction in watershed areas, parenchymal hemorrhages, small nonaneurysmal subarachnoid hemorrhages, or [posterior leukoencephalopathy syndrome]," Dr. Calabrese said. Brain MRI in true PACNS usually shows multifocal lesions in the deep white matter, and cortical infarctions in the distribution of separate vascular territories.

With respect to neurovascular imaging, RCVS cannot be differentiated from PACNS by a single cerebral angiogram. "There is no angiographic picture that is 100% specific for vasculitis," said Dr. Calabrese. "Angiography is most useful when the pretest probability of vasculitis is high, based on presentation and clinical symptoms."

Although angiography occasionally reveals findings in PACNS that are uncharacteristic of RCVS, such as nonsymmetrical vascular luminal abnormalities or extensive vascular cutoffs, the vascular abnormalities observed in PACNS patients can be indistinguishable from those seen in RCVS. The most specific finding for RCVS is evidence of substantial improvement in the characteristic vascular abnormalities—diffuse areas of multiple stenoses and dilatation involving intracranial cerebral arteries—within days or weeks of symptom onset, said Dr. Calabrese.

"In fact, the linchpin of the [RCVS] diagnosis is evidence of the reversibility of the vasoconstriction and arteritis." The vascular abnormalities observed in PACNS patients rarely normalize and are frequently irreversible, he said.

In terms of treating RCVS, "there have been no controlled trials of any therapy to date," said Dr. Calabrese, noting that empiric treatments include the use of calcium channel blockers or short course, high-dose glucocorticoids. "The choice of agent is best gauged by disease severity and course," he noted.

In some patients, simple observation may be justified, whereas in others—particularly those in whom the thunderclap headache recurs, and those who have severe vasospasm or transient neurologic symptoms—agents such as nimodipine or verapamil have been used successfully as first-line treatments, he said.

"In all patients being treated for suspected RCVS," Dr. Calabrese stressed, "a failure to demonstrate dynamic change in the condition should prompt a thorough reevaluation and search for another diagnosis." ■

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