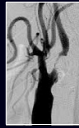




Shaking Limb Syndrome:

What Is Its Symptoms And Why Is It A Good But Uncommon And Overlooked Indication For CEA Or CAS



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FINANCIAL DISCLOSURE



I Have No Financial Relationships to Disclose

Sx Carotid Disease

Symptoms: Cortical

- Weakness, Paralysis, Numbness of Extremity (ics)
- Facial Droop
- Slurred Speech; Aphasia
- Monocular Blindness: Amaurosis Fugax

There Is An Exception to Every Rule
Shaking Limb Syndrome (SLS)



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Concerning Recurrent Transient Cerebral Ischemic Attacks

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ONE of the common problems in the practice of medicine is the recognition of transient spells or attacks of cerebral ischemic origin. Epilepsy, convulsions, stroke and migraine are, of course, the most important, but have well defined clinical and pathological features, and the clear clinical picture. Another class of recurrent spells, although of equally cerebral origin and importance, has been fully delineated and recognized clinically and pathologically in the transient attacks of cerebral ischemia associated with arterial atherosclerosis and thrombosis. While these brief spells of weakness, numbness, blurring

of vision, and other symptoms, are usually divided roughly into three types: (1) those in which only a single cerebral vessel, (2) those with multiple attacks of apparently the same pattern, and (3) those with multiple attacks of different patterns. In the second type which will be discussed in this report, usually recurrent spells of this nature pattern, a picture which has a rather fixed history in the medical literature. In the past there have been not infrequently attempts at treatment by a variety of means, but these have rarely been shown to be of benefit. In the present case, the patient may speak of the affected parts as trembling, shaking, twisting, drawing up or moving irregularly. This distinction from epilepsy may seem to be hair-splitting, but I believe that the movements associated with TIA are not really convulsive in nature,

Can Med J. 1962.

Clinical Presentation

- Unilateral Rhythmic or Arrhythmic Involuntary Hyperkinesias:
Hand; Arm; Leg; Hand & Arm; Hand & Arm & Leg
 - Jerking
 - Trembling
 - Twitching
 - Flapping
 - Wavering
 - Inability to Control the Arm
 - Lack of Coordination
- Duration: Usually ≤ 5 Minutes
- Anatomy: Severe Internal Carotid Artery Stenosis or Occlusion

Precipitating Factors

Activities That Lead to Hypotension & Cerebral Hypoperfusion

- Exercise
- Arising From Chair
- Arising From Bed
- Hyperextending the Neck
- Hyperventilation

Differential Diagnosis

LS-TIAs vs SEIZURES

- Precipitating Factors
- Normal Level of Consciousness
- Absence of Tonic Contractures
- No Involvement of the Face or Trunk
- No Epileptic Discharges on EEG

Pathophysiology

→ Disinhibition or Release of Subcortical Motor Systems in the Setting of Cortical Ischemia

- Exhausted Vasomotor Reactivity
- Autoregulatory Failure
- Maximal Dilatation of Arterioles

Diagnostic Modalities

Xenon-133:

Regional Decreases in Cerebral Blood Flow

TCD:

Reduced Vasomotor Reactivity to Hypercapnia

PET Scan:

Acetazolamide-Induced Hypoperfusion

Treatment

- Carotid Endarterectomy
- Carotid Stenting
-
- EC-IC Bypass

Post-Intervention: ICH

Limb-Shaking TIAs

Treatment	# of Cases	ICH
CEA	13	3
CAS	1	0

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SUMMARY

Limb Shaking TIAs

- Rare But Well Accepted TIA
- Due to Cerebral Hypoperfusion Secondary to Severe Occlusive Disease
- Differential Diagnosis: **Seizures**
- Rx: CEA or CAS or EC-IC Bypass
- Increased Risk of Post-Intervention Hemorrhage