

***Case reports about an overlooked
cause of neck pain: Acute calcific
tendinitis of the longus colli***

Jung-Kil Lee, M.D., PhD., Seul-Kee Lee, M.D.

***Department of Neurosurgery
Chonnam National University Hospital, Gwang-Ju
South Korea***

Introduction

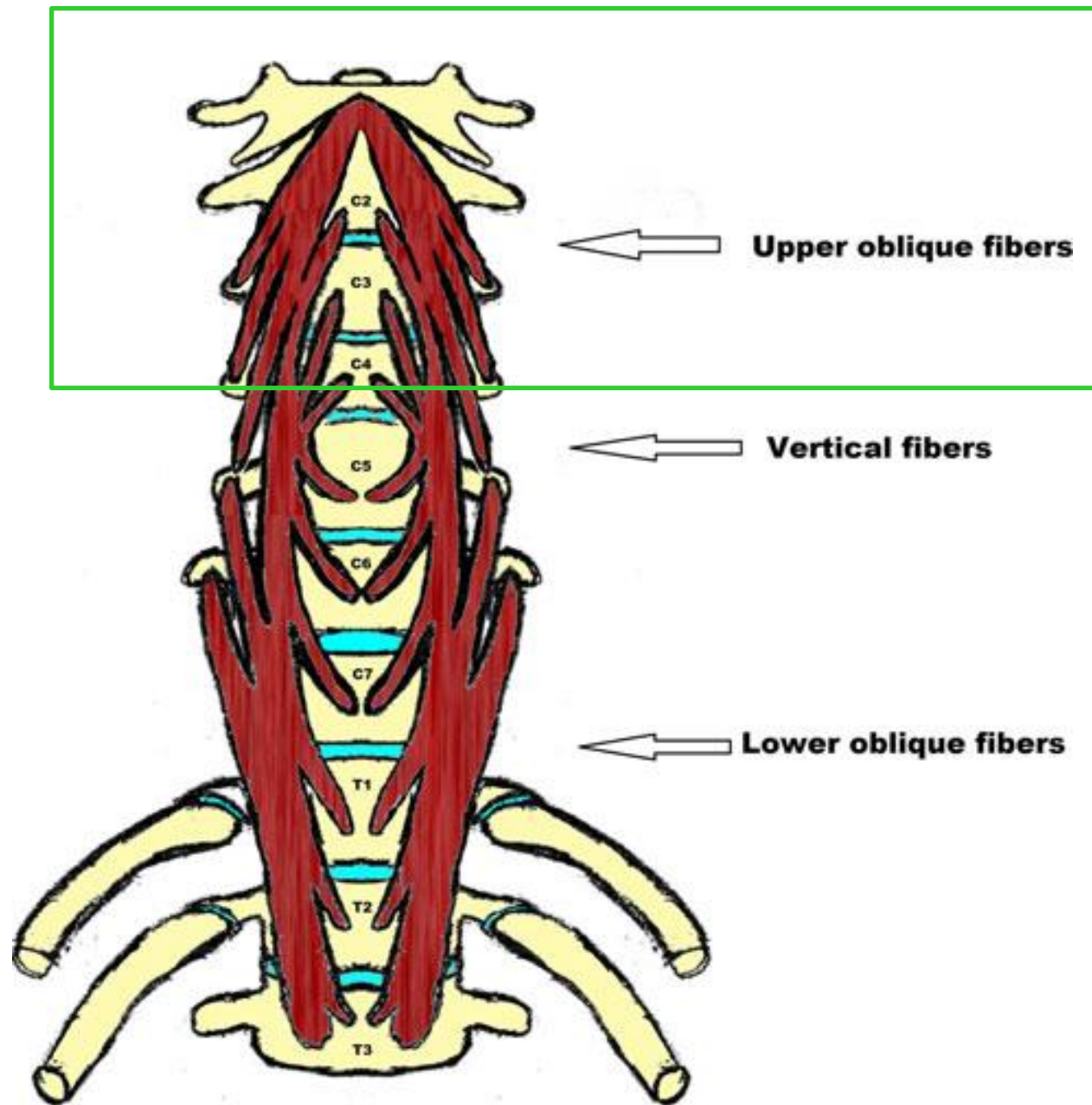
- **Aseptic inflammatory** process

located in the cervical prevertebral space

- **Proposed pathogenesis**

: calcium hydroxyapatite crystal deposition

at the C1-3 vertebral level



- Patients visited with complain of
: **acute neck pain, neck stiffness, odynophagia**



- **Easily misdiagnosed**

such as retropharyngeal abscess ? / spondylitis ?

previous traumatic injury ?

- **Under-recognized** cause of acute cervical pain

- **Unnecessary surgical or medical tx.**

→ Some cases with

acute calcific tendinitis of longus colli muscle

Table 1. Clinical characteristic of acute calcific tendinitis of longus colli : 8 cases

No.	Age	Sex	Symtom	Symptom duration	WBC (cells/uL)	CRP (mg/dl)	ESR (mm/h)	Treatment	Symtomatic resolution	Laryngoscopy
1	41	F	Headache Neck pain Neck stiffness Odynophagia	3 days	8600	0.45	8	NSAID	4 days	x
2	43	M	Headache Neck pain Neck stiffness Odynophagia	3 days	10400	5.05	28	NSAID, Antibiotics	follow up loss	o
3	42	M	Neck pain Neck stiffness Odynophagia	4 days	14200	6.96	not checked	NSAID, Steroid, Antibiotics	11 days	o
4	42	F	Neck pain Neck stiffness Odynophagia	2 days	6500	0.753	79	NSAID, Antibiotics	5 days	o
5	48	M	Neck pain Neck stiffness Odynophagia	1 week	10300	3.76	not checked	NSAID, Antibiotics	4 days	o
6	45	F	Neck pain Neck stiffness Odynophagia	1 week	10700	2.13	11	NSAID	3 days	x
7	46	M	Neck pain Neck stiffness	3 days	11260	2.22	20	NSAID, Neck brace, Antibiotic	8 days	x
8	49	M	Neck pain Neck stiffness Odynophagia	5 days	7000	3.37	22	NSAID	5 days	o

CT images on All patients



Discussion

- A foreign-body inflammatory response to deposited **calcium hydroxyapatite** in the superior oblique tendon of **longus colli**
- Etiology of deposit is unclear
May caused by
repetitive trauma, recent injury, tissue necrosis or ischemia
- The mean annual crude incidence : **0.5 cases per 100,000**
The standardized incidence : **1.31** age- matched population.
- The most common symptom
acute neck pain, neck stiffness, odynophagia
Mild pyrexia (mild leukocytosis with mild elevated ESR on lab.

Discussion

- **CT** is the gold standard, MRI is not usually necessary
- Difference from retropharyngeal abscess, infectious spondylitis
 - Pathognomonic tendinous calcifications within the longus colli
 - No associated enhancement around the effusion
 - Absence of suppurative retropharyngeal space lymph nodes
 - Absence of bony destructive change
- Conservative treatment (Self limited disease within 1-2 wks.)
 - NSAIDs** medications
 - Immobilization** with a neck collar to decrease movement
 - Steroids** on severe symptoms

Summary

- Calcific tendinitis of longus colli is **not a rare disease**
- **Correct diagnosis**
 - Avoiding unnecessary invasive procedure
 - Facilitate recovery from pathologic condition